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A PRELIMINARY REPORT
ON
A MAJOR STREET PLAN
FOR
NEWARK, NEW JERSEY



11/10/36 CENTRAL PLANNING BOARD *11/10/36*
OF THE CITY OF NEWARK, NEW JERSEY

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A PRELIMINARY REPORT

ON

MAJOR STREETS

FOR

NEWARK, NEW JERSEY

THE CENTRAL PLANNING BOARD

OF THE CITY OF NEWARK

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September 1945

Central Planning Board of the
City of Newark, New Jersey

Gentlemen:

We are pleased to submit herewith our preliminary report on a major street plan, being the sixth of a series of reports comprising the Comprehensive Plan of Newark.

Heretofore, many street improvement projects have been undertaken in Newark. Many of these projects have been extremely valuable in facilitating traffic movements and their cost has been more than justified. Other projects have not been so successful for various reasons. The plan presented herewith can be used as a basis for future changes in, or supplements to, the system of main thoroughfares. Such a plan will be helpful in preventing future mistakes.

The Major Street Plan is one of the most important parts of the Comprehensive Plan of Newark. It provides the framework for a more adequate local transportation system. It has been used in analyzing the adequacy of present zoning districts and is most helpful in neighborhood planning.

The plan has been prepared from all available sources of information and we have enjoyed the most helpful cooperation of the City, County, State and Federal highway officials. We wish to express our appreciation for all such assistance.

Respectfully submitted,

HARLAND BARTHOLOMEW & ASSOCIATES

By:

SUMMARY OF FINDINGS AND CONCLUSIONS

- I Post war traffic in Newark will be greatly in excess of present or pre-war volumes. Conservative estimates indicate that within five years there may be an increase of fifty per cent. Motor vehicle registrations in the Newark Metropolitan area is expected to increase from 354,000 (1940 figures) to 533,000 in 1970.
- II Newark's traffic problems are serious but they can be solved if a comprehensive and coordinated program of street improvements is carried out jointly by the City, County, State and Federal governments. The basis for such a program is contained in this report.
- III Street improvements to be undertaken by the City of Newark should be made part of a long-range improvement program covering all capital expenditures to be made during the next twenty-five to thirty years. This program should be closely coordinated with a long-range financial program. Additional financial assistance from County and State sources will be required.
- IV A comprehensive plan of parking facilities in the Central Business District should be adopted and carried out simultaneously with the street improvement program. This program is summarized as follows:
1. Supplement present parking lots and garages by providing additional off-street facilities for shoppers and other persons having business in the district in the form of open-deck type parking garages located as near the center of retail business as possible.

2. Augment the above facilities by constructing an underground parking garage in Military Park.

3. Provide additional facilities for all-day parkers and persons transacting business downtown by means of parking lots located along the distributor streets skirting the edges of the business district.

4. All off-street parking facilities should be privately operated. The City can assist in carrying out the program by acquiring property by condemnation and leasing to private operators at a rental sufficient to retire the necessary bonds and pay an equivalent of full taxes on the property.

5. Install additional parking meters on streets convenient to retail shops where unmetered limited time parking is now in effect.

6. Extend "No Parking" restrictions on streets where roadway capacity is limited and traffic is heavy.

7. Strictly enforce all curb parking regulations to insure utilization of off-street facilities and maximum turnover of spaces.

8. License all parking lots and prescribe minimum standards of size, location of entrances and exits, surfacing and fencing.

Following is a brief digest of the principal recommendations for specific improvements. No cost estimates have been prepared and the suggested program is tentative and subject to revision after completion of the long-range capital improvement program.

1. Following approval of the report by the Central Planning Board and the Citizens' Advisory Committee, an official map should be prepared, on which all future streets and street widenings should be shown, thus establishing building lines within which no new buildings may be erected. The official map must be adopted by ordinance enacted by the Board of City Commissioners.

2. The following projects are of immediate importance and should be undertaken as quickly as funds can be made available:

(a) State Highway Improvements

(1) Complete Route 21 (McCarter Highway) through City of Newark.

(2) Construct William A. Stickel Memorial Bridge and its approaches to Clifton Avenue.

(3) Construct Route 25-A Freeway connecting the approaches to the Stickel Bridge at Clifton Avenue, extending westward to a connection with Northfield Road in West Orange and eastward to the Lincoln and Holland Tunnels.

(4) Construct Route 100 through Port Newark to connect to Lincoln Tunnel in New York.

(5) Improve the Newark approach to Pulaski Skyway by widening Foundry Street underpass.

(b) County Highway Improvements

(1) Acceptance by Essex County of the Mt. Prospect, Clifton Avenue, Norfolk Street, Jones Street, Belmont Avenue cross-town route as a county highway.

(2) After acceptance of above route construct connection between Mt. Prospect and Clifton Avenues at Bloomfield Avenue.

(3) Widen Norfolk Street between Orange Street and South Orange Avenue to 80 feet.

(4) Widen Bloomfield Avenue from City Limits to Broad Street to 100 feet.

(5) Acceptance by Essex County of Broadway between Bloomfield Avenue and Broad Street as a county highway.

(6) After acceptance of above route widen Broadway between Bloomfield Avenue and Seventh Avenue to 100 feet.

(c) City of Newark Improvements

(1) Plan and improve Lock Street between Sussex Avenue and Market Street, including separation of grades at Central Avenue. (Consideration should be given to making this improvement a State highway project).

(2) Widen Astor Street between Clinton and Sherman Avenues to 100 feet.

(3) Widen Springfield Avenue between its junction with South Orange Avenue to Market Street to 100 feet.

(4) Improve Raymond Boulevard between Lockwood Street and its intersection with Market Street by raising the right-of-way of the Morris Canal.

(5) Secure necessary legislation to permit the City to acquire property for parking lots and garages. After legislation is enacted, negotiate with private operators for construction of recommended lots and garages.

3. The following projects should be undertaken within the next five to ten years.

(a) State Highway Improvements

(1) Construct Route 2L Freeway generally parallel to Springfield Avenue.

(2) Construct new high-level bridge to replace present Jackson Street Bridge.

(b) County Highway Improvements

(1) Complete north and south crosstown route composed of

Street, Jones, Norfolk, Clifton and Mt. Prospect by widening Belmont Avenue between Poddie Street and Watson Avenue to 80 feet. ✓

(2) Widen South Orange Avenue from Ninth Street to Springfield Avenue to 80 feet.

(c) City of Newark Improvements

(1) Widen Mulberry Street between Market Street and McCarter Highway to 100 feet.

(2) Widen Central Avenue from High Street to Broad Street to 80 feet.

(3) Provide a new 80 foot connection from Park Place and Center Street to Mulberry Street.

(4) Connect Plane and Washington Streets between Court and Baldwin Streets.

(5) Widen High Street to 100 feet from Bloomfield Avenue to Orange Street.

(6) Construct a highway over the Morris Canal from First Street to Heller Parkway. ✓

(7) Construct a new connection 80 feet wide from the intersection of Pennsylvania Avenue, Brunswick and South Streets to Clinton Avenue at Washington Street.

(c) Complete an improvement of Raymond Boulevard between Lockwood Street and Market Street by acquiring property between the Morris Canal and Raymond Boulevard for park purposes. ✓

I N T R O D U C T I O N

INTRODUCTION

A well planned modern street system is essential to the welfare and prosperity of postwar Newark.

Public streets are the most valuable asset any city possesses. In the city of Newark they occupy approximately 25 per cent of the entire urban area. They provide means for circulation of traffic throughout the city and for access to all property. They furnish light and air to abutting properties, and in them are located the various public utilities that make urban life possible.

They not only provide means for access between all parts of the community, but by their connections to the State Highway system, they furnish means of communication with all parts of the country.

A well designed street system must provide easy, safe and convenient access to residential, commercial and industrial sections of the city from all parts of the city and metropolitan area. Such a system will eliminate or greatly minimize traffic congestion and increase safety both for motor vehicles and for pedestrians. Closely associated with a modernized street system is the provision of adequate off-street parking facilities. In commercial and industrial areas, such a system will minimize the dumping effects of heavy traffic in residential districts by channelizing such traffic on streets which carry it around these areas.

Because of the difficulties of keeping pace with the rapid development of the automobile, no American city has solved its traffic problem. Most cities' street systems were laid out before automobiles were even thought of, and once established, the pattern is most difficult

costly to change. Hence the street system is modernized in accordance with present and future traffic needs and as part of the comprehensive plan of rebuilding the community, stagnation will take place, decentralization will be accelerated and property values in the central areas will continue to decline.

The rapid development of the automobile has had a far reaching effect on its development, and has widened the potential area of urban development from the former 4 or 6 miles radius to a radius of 20 miles or more. While the centralized city still retains the most economical and sound form of urban structure, the stability of all large urban communities has been seriously threatened by the continued spread of population into the suburbs. So long as acute congestion exists in the central city, this trend will continue. Lack of accessibility to the principal business sections of the city has also accelerated the decentralization of business which naturally follows the suburban spread of population. Continued deterioration of property values in the central area is inevitable unless effective measures are taken to increase the accessibility, safety and ease of movement and parking facilities in the downtown district.

One of the reasons for the spread of flight through the older residential areas is because traffic is dispersed throughout these areas over streets which are primarily residential in character and which are not designed to carry heavy traffic. Experience has shown that the great majority of traffic can be accommodated on less than one-fifth of the total street mileage in the urban area provided such streets are improved so as to facilitate freedom of movement and operational safety. Such streets should have a wide surface, direct alignment and should be so located as to serve the largest number of potential users most conveniently; these relatively

few streets are known as Major Streets while the rest of the thoroughfares comprised in the system are known as Minor Streets.

This report is concerned with the design and development of a major street system for Newark. The spacing of major streets is such that the city is divided into neighborhoods or communities from which heavy traffic can be collected. These residential neighborhoods must be protected, rehabilitated or redeveloped in accordance with a comprehensive plan if the community is to remain in a sound and stable condition. The major street system must be carefully coordinated with the city zoning plan, its population density and distribution, railroad facilities and the city school and parks system.

Newark has become almost entirely built-up and comparatively little new population growth can be expected in the future. The problem resolves itself therefore, into improving what we now have that is bad, protecting good areas and gradually elevating the general tone of the whole community. Execution of the major street plan will greatly aid this program.

Since the present street pattern is so firmly established, from a practical standpoint, it will be necessary to use it as a basis for the new plan. As it is most difficult and expensive to increase the traffic capacity of the existing streets or to provide new streets through the built-up area, the modernization program must be planned to be carried out over a long period of time, and it must be completely coordinated with the city's long-range financial program. Since the present street system is not adequate to meet present traffic requirements, the plans and proposals of this report, in addition to providing for future needs, must correct existing inadequacy.

BASIC PRINCIPLES OF STREET PLANNING

BASIC PRINCIPLES OF STREET PLANNING

A. There Must be a Differentiation Among Streets.

Before the advent of the automobile there was little need for streets of different widths. Horses drawn vehicular traffic traveled at slow speeds and there was little or no congestion. The crowding of a large number of automobiles on urban streets created a different situation. Every intersection became a hazard. Unless a street was wide enough to carry the moving traffic in both directions, a few slow vehicles tied up the entire traffic flow. The crowding of land in any city is used for residential purposes. The presence of traffic on every street created hazards and made the area less desirable for residential use. It was found, however, that by developing a few wide and direct routes for heavy traffic, the majority of vehicular movement could be accommodated on a small portion of the total street mileage. In the residential streets could be used solely for local access. This in turn could be protected from congestion and danger. This differentiation among streets is the first basic principle of street planning.

B. Three Directional Movements Must be Accommodated.

The major streets must accommodate the various directional movement of traffic.

Radial Movement. The major traffic movement in any large urban area such as Chicago is from places of residence to places of employment, the central business district and nearby industrial areas being the major objective of traffic. During short periods in the morning and evening, this traffic is quite heavy and the major streets must be designed to accommodate these heavy periods of heavy flow. Wide and direct routes radiating from the central business district to all portions of the urban area are essential. Radial traffic has three

... traffic from the residential areas to the central business district, the commercial district, and the industrial district. (The traffic from the residential areas to the central business district is the greatest traffic flow in the city, and the greatest congestion is found on the radial highways.)

Inter-connection of roads is important. In large metropolitan areas such as Newark, there is also considerable movement between the different residential districts, and between the residential districts and the central business district, and between the residential districts and the industrial district. Inter-connection of roads is also very important. Inter-connecting and cross-town streets are also used for connections or feeders between radial highways and the various residence areas.

By-pass roads are required. All the traffic from the residential areas to the central areas of the city, some traffic from one residential area to another, and some traffic from the residential areas to the city. In so doing, it is not only delayed but adds to the congestion in the central area. Bypass roads should be provided to carry traffic to and from the central areas. There is also some industrial traffic that would prefer to go around rather than through the entire urban area. Streets and by-pass roads are also required as distributor roads, permitting traffic to skirt an area. The first road should be the last convenient point of entry is reached.

• Six Types of Major Streets are Required.

These many diverse functions and the amount of expected traffic

appear to have been a lack of coordination of major streets.

1. Inter-street Highways. These are thoroughfares which are intended to carry large volumes of traffic between two or more areas. They would give direct and convenient access to the centers of large cities. Their chief purpose is the acceleration of through traffic between the city centers. However, by so doing, they will relieve the local streets of through traffic, particularly through traffic. They will also relieve the city center of traffic, which is a wide circulation of popular cars and vehicles. There would be no intersection of roads, and as to the roads are highway projects, which are to be a short at intersecting roads would be few in number and a considerable distance apart.

2. Radial Streets. These thoroughfares are the most important part of the entire street system. They are somewhat analogous to the spokes in a wheel, if you will the central business district is the hub, connecting the hub of the city out to downtown sections. Their chief function is to connect the central point in the downtown, and the future vitality of the central business district is dependent on the ease, flow of traffic over these thoroughfares. Inadequately so congestion will be the result of this to other sections, a prevalent urban ailment, and produce untoward conditions of urban growth. Presently, these streets serve as part of the inter-radial, state or county highway systems. Because of these factors, the local vertical roads they will be required to handle, the radial streets will be continuous, direct and of adequate width to perform their function safely and expeditiously.

3. Circumferential Boulevards. Circumferential boulevards are extremely important. As the city continues to grow and expand their usefulness will increase to such an extent that they will become highly significant parts of the major street system. The value of circumferential boulevards

distribution of traffic within this district. Surrounding the business district with wide distributor trafficways permits vehicles entering the district to use these thoroughfares as an approach to the particular street that permits the most direct entry to its destination within the congested area. They also assist in preventing unwarranted scattering of the central area by providing a desirable boundary. As the business district expands, these thoroughfares become exceedingly important and it is essential that wide thoroughfares designed to adequately provide for anticipated traffic flow be furnished in order to control proper traffic distribution and growth of the business district.

Parkways. Parkways are always desirable parts of a city's system of traffic thoroughfares. They are supplementary to basic traffic movement, as a rule, being primarily designed for pleasure and recreation, but they can often serve both purposes without serious interference. Where existing development will not make the cost excessive, an important major street could well be designed and improved as a parkway. It will add greatly to the amenities of the city, to the enjoyment of the large number of users and will conserve if not enhance property values. This matter will be given further study in connection with the Park and Recreation plan.

D. Right-of-Way Width Controls Traffic Capacity and is a Primary Concern of Street Planning.

The pavement of a street can be widened or even narrowed without great difficulty. However, once a street right-of-way is acquired and buildings erected along the street, the right-of-way can be widened only after great difficulty and expense occasioned by the consequent injury to improved property fronting along the street. Because of this, the major plan is concerned primarily with the acquisition of sufficient right-of-way width

rather than with the width of the pavement. With heavy residential location of a right-of-way that is too wide is, comparison with the great costs of widening a right-of-way that is too narrow.

In the normal city street where traffic crosses the road and traffic is not observed, the maximum capacity of each traffic lane will vary from 1,000 to 1,200 cars per hour. On interregional and express routes the capacity may be as low as 1,000 cars per hour. However, it is seldom that a street carries its maximum capacity, due to interference of parking cars, failure to keep moving, or in the large number of vehicles of the traffic. For this reason a street can give efficient service only when it provides for four moving and two parked lanes. Furthermore, the maximum capacity of a street is relatively short period of the morning and evening rush hours. Then the street is primarily a one-direction and still is only a small part of the street. Thus the adequacy of the street can't always be judged by their theoretical capacity. The facilitation of traffic movements will improve property values throughout the city and thus compensate for the cost of widening along the major routes.

The character and width of pavements in a city should be determined by the consideration of traffic movement and parking. For example, major arterial streets used only by local traffic can be limited to a width of 40 feet. For such a street a width of 50 feet can be used, although a 60 foot width is more satisfactory and provides a better neighborhood effect. Multiple function streets have caused past difficulty, especially in the case of locally located thoroughfares to supplement main thoroughfares. This has been caused in part, by the inadequacy of main thoroughfares.

With a few exceptions, the proposed major streets in Newark would be in the form of plan thoroughfares. For an 8 lane pavement, a 100 foot right-of-way at least 100 feet is essential. This would provide for an ultimate roadway of 76 feet to 76 feet and minimum sidewalks of 12 feet. Such a thoroughfare might be developed in stages. In the first stage a 50 foot pavement could be constructed, leaving 15 feet grass plots and 12 feet sidewalks for planting areas on each side. When the increase in traffic necessitates additional roadway space, the curbs could be set back 15 feet on each side and the road widened for the new paving. In some cases it may be desirable to provide for future widening by providing a central median strip on the first stage of development.

The suggested development of 80 foot major streets would permit an ultimate pavement of 60 feet for 4 lanes. This would permit a 100 foot roadway with two parking and two driving lanes and a 100 foot side by 22 feet of sidewalk and planting space. Further widening would utilize 10 feet of this strip, leaving 12 feet for sidewalk and landscaping. To facilitate this future widening, all trees and overhead utilities should be kept back of the future curb line.

In semi-urban and rural areas, the traffic flow will not require the wide pavements needed in the heavily developed urban areas. However, on all important highways, there should be a central park strip dividing the opposite streams of traffic. Traffic speed in these areas is higher; consequently, sight distances must be longer. More area is needed for drainage and for adjustment of the highway to the topography. Even though the traffic is lighter in the outlying areas, the right-of-way should be wider. Thus a fairly heavy travelled highway required a minimum right-of-way of 150 feet. In rural areas to permit an initial development of two 22 foot roadways

separated by a 49 foot park strip.

In international and express highways, because of their wide, unobstructed, dual carriageway projects and as a result no fixed parking spaces are provided, with a wide shoulder or park strip. Inside rather than outside, road, traffic separation and interchanging, for better visibility and safety, requirements will necessitate certain variations in design and construction.

The more important thoroughfares such as the radial streets, the collector streets, the distributor streets and a few of the connecting thoroughfares which serve the more congested and highly populated areas, should usually have a minimum width between property lines of 100 feet.

In a few instances secondary streets of 60 to 66 feet may be of sufficient width. In this width and as to the foot pavement and, with parking, only one lane of moving vehicles in each direction, it may be of sufficient width for certain streets serving local residential sections where traffic demands will never be great.

Business district streets should normally have 4 lane or 6 lane roadway to permit on parking, lane on each side of the roadway and either one or two main traffic lanes in each direction. Where such roadway width is undetermined it is frequently advisable to provide a one way traffic movement only, using a roadway width designed according to the number of lanes of traffic to be accommodated. When the volume of traffic flow is unusually heavy in business districts, as during certain rush hours, roadway widths should be designed to accommodate the full volume of traffic and with no parking during peak periods. A 100 foot width for each traffic lane is desirable. Sidewalk widths should vary on business district streets

according to the nature of building use. It is a still more important factor in determining the need for sidewalk width than in cases of intensive use for retail business, banking and office buildings.

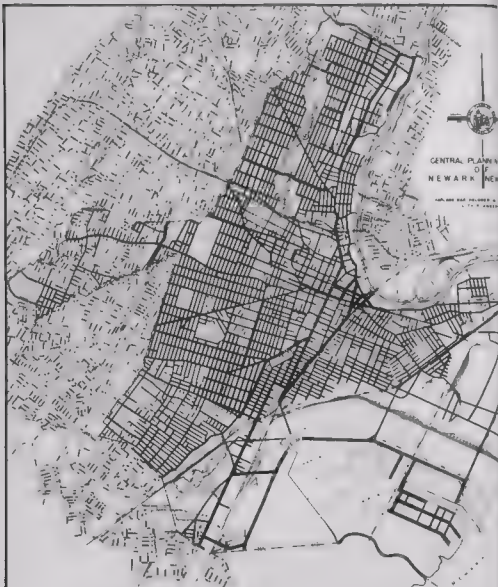
2. Spacing of major streets must be related to population density.

The traffic flow on any street is usually proportioned to the population density of the area served by the street. Through traffic is but a small portion of the total traffic flow on a city street. A traffic flow on a city street is a surprise, increases as the center of the city is approached and the density of population increases. Traffic flow taps into the city as the density of population increases as the center of the city is approached and the density of population becomes greater. This is a perfectly natural phenomenon.

A major consideration of planning major streets must, then, be related to existing, but to probable future patterns of population. Where population is low, streets must be wider and more closely spaced. Where population is dense, the streets can be further apart. In intensively developed areas major streets must be wide and closely spaced. In rural areas a spacing of three to five miles apart is satisfactory. Thus, there is a close relationship between the street plan, standards of population, road distribution, and any regulatory measures that affect population density, such as zoning and subdivision control.

Radial streets are relatively far apart at the outskirts of the city and converge near the center. Physical obstacles such as topography or large open areas such as parks, cemeteries or large institutions influence the location and location of principal streets. Cross-streets intersecting the urban area should usually be from one-half to one mile apart.

EXISTING STREETS



CENTRAL PLANNING
OF
NEWARK, NEW JERSEY

SCALE BAR: 1/4" = 100' 0"

CITY OF NEWARK, NEW JERSEY EXISTING STREET WIDTHS

LEGEND

ST. CODE	ST. WIDTH
10	10' 0"
15	15' 0"
20	20' 0"
25	25' 0"
30	30' 0"
35	35' 0"
40	40' 0"
45	45' 0"
50	50' 0"
55	55' 0"
60	60' 0"
65	65' 0"
70	70' 0"
75	75' 0"
80	80' 0"
85	85' 0"
90	90' 0"
95	95' 0"
100	100' 0"

EXISTING STREETS

The Newark Major Street plan is based on the existing street system. In a preceding section of the report the general standards for the future street system in Newark were discussed. This section of the report will determine how well the present streets meet these standards.

Street width. At the present time the streets and alleys of Newark occupy 2848.8 acres or 18.7 per cent of the total area of the city. Plate 1 shows a picture of the existing street layout and has been prepared to show the irregular and uncoordinated manner in which the system developed. The widths of existing streets are expressed in terms of traffic lanes that can be accommodated within their present right-of-way. The streets are divided into four categories, i. e.: those that can accommodate 4, 6, 8 or 12 lanes with respective widths of from 51 to 69 feet, 70 to 89 feet, 90 to 109 feet, and more than 110 feet. Streets with a right-of-way width of 51 feet or less are not graphically indicated. The width of bands is in general proportion to the width of the streets.

A glance of the map shows the relative importance of streets having a traffic capacity of eight or more lanes. There are a few streets having a capacity of 8 to 10 lanes of traffic, but, in many instances, these streets are isolated and do not form an important part of the circulatory system. For example, the industrial streets laid out in Port Newark have generous widths, but they are special service streets and are not a part of the traffic circulatory system. The city is fortunate in having a few continuous thoroughfares such as Broad Street which run through the center of the business district, and other streets such as Clifton Avenue, Newark Street and Raymond Boulevard which are capable of accommodating large

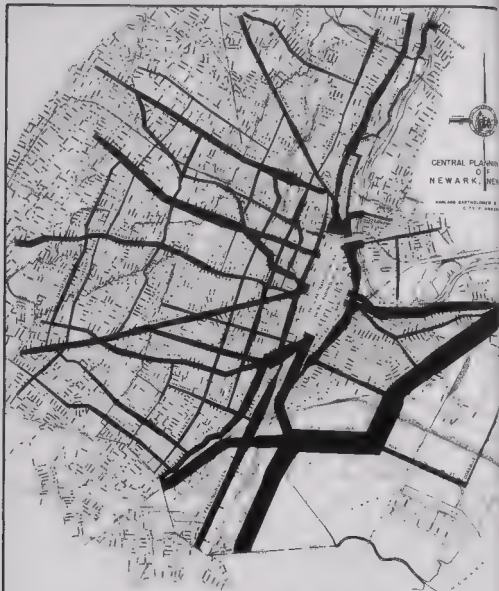
volumes of traffic.

The lack of past planning is clearly shown in the inadequate width of most of the radial thoroughfares leading from the suburban areas to the central part of Newark. Bloomfield Avenue, Springfield Avenue, South Orange Avenue and West Market Street are examples of well located streets whose usefulness is much hampered because of inadequate width. It is interesting to note that in the case of Springfield Avenue and South Orange Avenue their width is greater in the outskirts of the city than near the center where traffic is heavier. There are several radial streets leading through the center of the city which have adequate width but which do not connect with streets leading to the central business district.

The typical Newark block is 200 x 400 feet in size. The prevailing street width is 36 feet, but in many sections of the city there is a wide variation. Generally speaking the streets in the northern part of the city have more generous width than in other sections, particularly the Ironbound, the Bergen section and the Vailsburg area. In the southern part of the city it becomes generally customary to lay out streets having rights-of-way of 50 feet.

The drawing clearly shows the absence of adequate, continuous and wide north and south thoroughfares. This is a deficiency which must be remedied in the future.

The drawing also shows the effect of physical obstruction on the street system. The Passaic and Erie Railroad and the Lackawanna Railroad introduced barriers which resulted in the abandonment of many streets. Branch Brook Park is another physical barrier to free inter-communication in an east and west direction in the northern part of the city. Other physical barriers are McClellan Park, Fairmount Cemetery and Woodland Cemetery.



CENTRAL PLANNING
OF
NEWARK, N.J.

HARLAND CARTHOODS &
CITY ENGINEER

CITY OF NEWARK, NEW JERSEY VEHICULAR TRAFFIC FLOW

LEGEND

VEHICULAR TRAFFIC FLOW



IN THOUSANDS OF FEET

DATA FROM STREET TRAFFIC SURVEY BY
DEPARTMENT OF PUBLIC SAFETY AND IN P.A.
AND FROM STATE HIGHWAY DEPARTMENT

APPROX. 100 PER CENT DATA FOR YEAR 1940
DATA FOR YEAR 1940 FOR YEAR 1940

OF YEAR 1940 FOR YEAR 1940
OF YEAR 1940 FOR YEAR 1940

NOTE
COUNTS COVER 1/2 MILE PERIOD
ON HIGHWAYS DURING 1940

In general the drawing shows the results of unplanned and haphazard past growth. While there are many wide streets in Newark, in many instances they do not form a part of a logical pattern and in many instances they are the cause of inviting heavy traffic in residential areas. Excessive width of residential streets also is the cause of excessive street pavement cost, as in most instances the width of pavement is arbitrarily determined by using three-fifths of the right of way.

General Traffic Flow in Newark. That a great rapidly increasing traffic flow which used the principal city streets in the years immediately preceding the war, information from the drawing is obtained from the Street Traffic Survey made by the Department of Public Safety and published in Newark 1936. The actual survey, however, was made in 1936 and 1937 in cooperation with the Federal Works Projects Administration.

The width of the bands on the drawing shows the total 12 hour (7 A.M. to 7 P.M.) week-day traffic using the streets in Newark.

The dominant traffic routes are shown to be State Highway 25 and State Highway 2, which skirt the southern and eastern limits of the city. Much of the traffic using these routes is enroute to New York and other eastern communities and a large proportion of it is commercial trucking. There is an equally large volume of traffic on Broad Street. The radial streets approaching the downtown area are heavily traveled; for example Central Avenue accommodates approximately 20,000 vehicles per day; Park Avenue, Springfield and South Orange Avenues, approximately 15,000 per day, while Redway, Frelinghuysen and Millard Avenues carry equal amounts.

Because of the congestion existing on Springfield Avenue a substantial portion of the traffic bound for the central business district leaves that street and proceeds on Avon, Clinton and Eighteenth Avenues to

in vertical section with broad street. Similarly, traffic entering the city over Park Avenue does not proceed over the most direct route, but disperses itself over several streets before reaching Bloomfield Avenue and Broad Street.

The drawing shows where bottlenecks now exist. For example, Park Avenue discharges traffic into Broad Street instead of carrying it straight on to a logical connection to Clinton Avenue. Park Avenue with its intersection with Park Avenue and Broad Street also shows clearly on the drawing the extremely inadequate width of Broad Street, south of Bloomfield Avenue is clearly apparent.

The lack of direct north and south thoroughfare also is shown on the drawing.

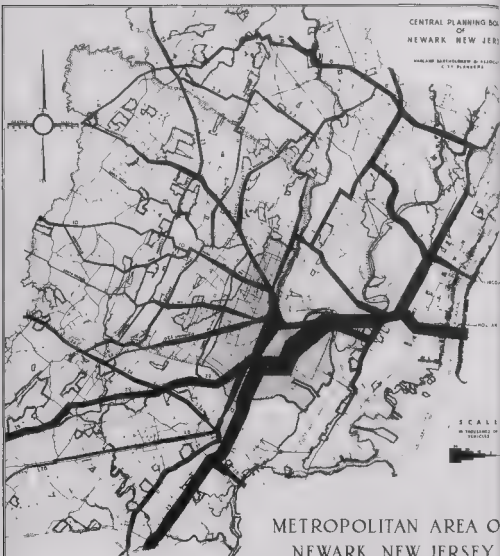
Particular Traffic Flow in the Newark Metropolitan Area. Part 3 shows the 1941 volume of traffic flow on the principal State Highways within the Newark Metropolitan area. The south of land represents the total number of vehicles using the highway during an average 24 hour period. In comparing this plot with Part 2, it is important to remember that the traffic volume shown on the Newark Street System was for a 12 hour period.

State Highway 25 (Federal Highway No. 1, is one of the most heavily traveled thoroughfares in the country. That portion of the highway between the traffic interchange at the Newark airport and the Passaic Skyway carried approximately 70,000 vehicles during an average 24 hour period before the war. On Sundays and holidays this volume approaches 100,000 vehicles. Most of this traffic is bound to and from New York and the District is a valuable by-pass carrying this traffic around the outskirts of Newark.

After crossing the Passaic River, the major part of the traffic

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SCALE
IN MILES AND KILOMETERS

METROPOLITAN AREA OF NEWARK, NEW JERSEY TRAFFIC FLOW ON PRINCIPAL HIGHWAYS

WIDTH OF BAND REPRESENTS AVERAGE 24 HOUR TRAFFIC
VOLUME IN 1941

NUMERALS INDICATE STATE HIGHWAY NUMBERS

OPERATING FOR BEST MAP PRESENTED BY THE
NEW JERSEY STATE HIGHWAY DEPARTMENT

REPRODUCTION FROM NEW JERSEY HIGHWAY DEPARTMENT 1941 1000 HIGHWAY PLANNING MAPS

enters the Lincoln Tunnel while a substantial portion continues north on State Highway 1 and disperses itself in northern New Jersey or crosses into New York over the Lincoln Tunnel or the George Washington Bridge.

State Highway 29 which joins Highway 25 at the Newark Airport carries a relatively large volume of traffic. Approximately 30,000 automobiles use this highway daily between its intersection with State Highway 5-24 and Highway 25.

Other State highways which are largely used include State Highway 2, Springfield Avenue, State Highway 23 and its continuation over Bloomfield Avenue, and State Highways 6 and 3 which lie to the north of Newark. South Orange Avenue and Park Avenue which lead to Newark from the western suburbs are not State highways but they are of equal importance in the metropolitan highway system. It is interesting to note that Route 10 traffic west of the City is relatively light, ranging from 5,00 to 10,00 vehicles per day at its heaviest points. This would indicate that there is not a pressing need for the extension of Route 10 as a by-pass around Newark for some time to come. It is of far importance to improve highway facilities leading directly to the center of Newark from the southwest, west and north. Additional by-passes should not be constructed until the highway needs of the urban area are adequately met.

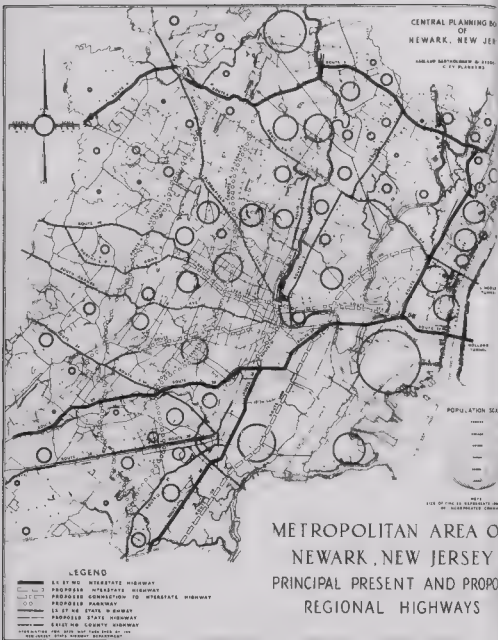
Principal Present and Proposed Regional Highways.

Plate 4 shows present State highways and the proposed extensions and connections. The drawing also indicates the population of all of the incorporated communities in the Newark metropolitan area, the size of the circles being in proportion to the 1940 population.

There are 4 highways in the Newark area which form a part of the national interstate highway system. These are State Routes 25, 29, 1 and 6.

CENTRAL PLANNING BO
OF
NEWARK, NEW JER

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LEGEND

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本行總行設在上海，分行遍設於國內各主要商埠，並設有信託部、保險部、倉庫部、運輸部、以及各種附屬機構，業務範圍極其廣泛。本行資本總額為一千萬元，實收資本為五百萬元。本行信譽昭著，業務發達，為我國金融界之巨擘。

In all cases the highways by-pass Newark. Routes 29 and 25 run to the south of the City and pass through the latter industrial district. Route 25 is parallel to the Hudson River and is a continuation of Route 25. Route 1 runs to the north and connects directly with the George Washington Bridge.

The chief characteristic of the State Highway system in the Newark area is the lack of routes leading through the urbanized sections. It will be noted on examination of the drawing that Route 23 terminates in Verona; Route 10 terminates in West Orange; Route 54 ends at the Essex County line; Route 27 ends at the Newark city limits and Route 7 terminates at the northern corporate limits of the City. In only through Route 8 which connects the suburban areas of Newark with the center of Newark are county highways such as Woodlawn Avenue and South Orange Avenue or they in fact consist of local city streets. Another serious deficiency of the State Highway system as it now exists is the lack of any through north and south highways connecting the east-west routes and furnishing direct access in a north and south direction.

In order to remedy the above deficiencies, several new proposed State highways are shown on the drawing. One of the most important of these is Route 1X which is proposed as a direct route to Highway 25 which it parallels from the southern part of the State to a point near the Pulaski Skyway and Bayonne Boulevard. This proposed new highway is to be a part of the Interstate system and will be fully developed throughout its length. Preliminary plans have been prepared for portions of the route but because of its great cost it will probably be several years before it can be constructed in its entirety. It is proposed to extend this route north and east over the Passaic River to a direct connection with the Lincoln Tunnel and to a proposed new route connecting the Holland Tunnel from the west.

It is to be noted that this highway will provide direct access to the Newark Airport from the Lincoln Tunnel in eastern Manhattan. Its construction will make it possible for express buses to operate from the proposed Port of New York Authority bus Terminal at West Street, New York, to the Newark Airport in approximately fifteen minutes. Thus, with its present connection to the Holland Tunnel, via the Passaic Expressway, the Newark Airport will have unexcelled facilities for reaching the lower and western New York area in that respect will be superior both to La Guardia and Idlewild Fields in New York.

Route 100 is at present legislated to cross Newark Bay and proceed northward through Bergen, but the interest of the State in the project is that the highway should be re-routed approximately at the location as shown on the plan.

In order to remedy the lack of direct communication to the interstate highways which bypass Newark, the proposed feeder routes are shown on the plan. The first of these proposed improvements consists of a new elevated freeway extending from Fort Lifford Road in East Orange to the new William J. Stickney Memorial Bridge across the Passaic River and thence west to an intersection with the proposed Route 100 and Route 15 near the Tompkins Circle in Jersey City. This route is designated as State Highway 45-A. It is now a local street between Jersey City and Clifton Avenue in Newark. Its western extension from Clifton Avenue is shown in detail on Plate 5 in the plan. The route is discussed at length in those sections of the report. The second feeder route to the interstate system is one which connects Route 24 in Maplewood to Route 21 (McCart Highway) in Newark. This route is designed to provide access from the central part of Newark to the southwestern suburbs including Irvington, Maplewood, Millburn, Springfield and

ment. Its construction will obviate the necessity for the widening of Springfield Avenue. While a definite location for this route has not been determined, it should be generally located as shown on the drawing. Further discussion of this improvement will be found in the Major Street Chapter of the report. Another feeder route to the interstate system is Route 21 (McCartor Highway) which connects the proposed Route 25-A with Routes 29 and 25. Originally this highway was designed as an elevated structure and sufficient right-of-way was required to build it in this manner. Subsequently, plans were changed and the highway is now to be built at grade. The State Highway Department is widening the roadway along that part of the route which parallels the Pennsylvania Railroad elevated tracks in Newark and its northern extension from Clay Street to Route 7 is one of the State's immediate postwar projects.

In order to remedy the lack of adequate north and south routes through the Newark metropolitan area, the State Highway Department proposes to construct Route 4 as a parkway from an intersection with Route 27 in Rahway to an intersection with Route 6 in Passaic County. Two alternate locations have been proposed both of which are shown on the drawing. The first location would extend through Union County to Irvington and thence would proceed north through Newark, East Orange, Bloomfield, Glen Ridge and Montclair. Location of this route has been under study through the area south of Essex County but no definite decisions have been reached from that point north. The plan suggests using Fraton Parkway, through Newark and East Orange, in order to reduce the damage to retailers in those two communities.

The alternate for this proposed parkway will extend around the western edge of the Newark area utilizing existing stream valleys where

possible and passing through South Mountain Reservation in West Orange.

There are several proposed connections between existing State Highways shown on the drawing. One of these is a completion of Route 1 at the Essex and Essex County line and another is the connection of E-3 across the Passaic River in Wittenberg and Essex County. The third is the completion of McCarter Highway in Newark.

Three important County highways which are a part of the regional highway system are: Springfield Avenue from Verona to downtown Newark; South Orange Avenue extending to Newark from its intersection with Route 1 in Livingston to West Orange. Plans for the improvement of these highways are shown on the Major Street Plan.

MAJOR STREET PLAN

MAJOR STREET PLAN

The proposed Major Street Plan for Newark is shown on Plate 5.

This is a long-range plan designed to be carried out over a period of from twenty-five to forty years. Some of the improvements are of immediate importance and should be executed as soon as possible. Other improvements can be made from time to time in accordance with the long range program of public improvements. The execution of this plan should not involve substantial cost to the City over and above what would be expended for street improvements in the ensuing years. The City will derive great advantages from coordinating the Street Improvement Program with the Major Street Plan as it is designed to eventually correct present deficiencies and provide essential facilities for future traffic.

The plan indicates where local, state and federal funds should be expended in the Newark area to the greatest advantage of all. While Newark must provide funds for execution of the street improvement program, it can and should receive substantial financial aid from Essex County, the State of New Jersey and the Federal Government. The traffic problems in Newark have more than a local significance as many of the main thoroughfares connect with the County and State Highway systems, and there are numerous City streets which are on the County Highway or the State Highway systems. The plan, therefore, is a guide that can be utilized to insure the wise expenditure of highway improvement funds at all levels of government. It should be accepted and adopted by the State and County Highway officials as well as by the City of Newark.

In developing this plan, it has been necessary to consider present and future highway needs of the entire Newark metropolitan area. In



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CITY OF NEWARK, NEW JERSEY MAJOR STREET PLAN

LEGEND

- — — — — EXISTING INTERSTATE HIGHWAYS
- • — • — PROPOSED INTERSTATE HIGHWAYS
- — — — — 16' ST'NS. CONNECTIONS TO INTERSTATE HIGHWAYS
- — — — — PROPOSED CONNECTIONS TO INTERSTATE HIGHWAYS
- — — — — 18' AND MAJOR STREETS OF SUFFICIENT WIDTH
- — — — — MAJOR STREETS TO BE WIDENED TO EIGHT LANES

- — — — — SIX LANE MAJOR STREETS OF SUFFICIENT WIDTH
- — — — — MAJOR STREETS TO BE WIDENED TO SIX LANES
- — — — — PROPOSED CONNECTIONS TO MAJOR STREETS
- — — — — FOUR LANE MAJOR STREETS OF SUFFICIENT WIDTH
- — — — — MAJOR STREETS TO BE WIDENED TO FOUR LANES
- — — — — PROPOSED TRAFFIC INTERCHANGE

the basis of an official over-all planning policy closely contact has been maintained with other Essex municipalities, the Essex County Engineer, the State Highway Department, the Regional Plan Association and the Port of New York Authority to insure that the Newark plan is properly coordinated with other highway plans for the area. The plan has also been coordinated with the Housing plan, the Parking plan for the downtown business district and the General Land Use plan for the City.

Wherever possible, existing streets have been used for the basis of the proposed system with new connections and extensions to provide better continuity and direction. Street widening has been kept to a minimum consistent with future needs and where such improvements are recommended, this should be preceded by the establishment of new building lines. This procedure will reduce the eventual cost of property acquisition by insuring that all new buildings will not be disturbed by the street widening program.

A description of the recommendations contained in the comprehensive plan follows:

Inter-State Highways:

Recent traffic counts have shown that the greatest problem of traffic congestion on federal highways exists in our large urban communities. Newark, the largest city in New Jersey is the objective of a large amount of traffic of neighboring communities, other parts of New Jersey and adjoining states. This traffic approaches the City over reasonably adequate State highways and then is forced to use the City streets system to reach the place to which it is going. These city streets are encumbered by local traffic, by transit lines, and in many instances have inadequate width. As a result the center of the City where most of the retail shopping and general

business is conducted as extremely inaccessible. From all directions fair, adequate facilities exist for by-passing traffic having no business in the City, but little progress has been made to facilitate the free movement of traffic from various points within the Newark urbanized area. Modernization of this highway system is a tremendous task. It is the responsibility not only of the City of Newark and other local communities, but also of the County, State and Federal Governments.

In recognition of the urgent need for improvement of federal highways within metropolitan districts, Congress has recently made substantial funds available to be used by the various state highway departments in modernizing urban highway systems. It is the objective of this legislation to provide a nation-wide system of interstate highways connecting the centers of all principal cities. These connections are to be modern grade-separated highways leading from the outskirts to the congested areas of our communities. It is proposed that these funds be expended on a relatively few such facilities rather than in making expensive corrections by means of widening existing streets.

The streets comprising the inter-state highway system are essentially freeways designed to facilitate the free movement of traffic to and through large urban areas so that it will not conflict with local traffic and be subject to delays and dangers now encountered on surface streets.

While the responsibility for the construction of inter-state highways lies with the State Highway Department, the location and extent of such improvements are of vital concern to the local communities and such planning should be a joint undertaking between the local planning officials and the appropriate County, State and Federal agencies.

In designing inter-state highways and their urban connections, as well as such facilities should be restricted to relatively infrequent points where major streets or highways intersect the freeway. Such limitation of access may require either the creation of partially depressed or limited thoroughfares with parallel local access roads. The alignments should be direct and curves and grades kept at a minimum. Intersections with present cross-streets should be separated and connections made by some form of traffic interchange. Generally speaking, the construction of this type of facility can best be accomplished by acquiring an entirely new right-of-way of sufficient width rather than attempting to utilize existing streets or highways. In a built-up community like the Newark metropolitan area, acquisition of a right-of-way, and construction cost will be high but the expense can be justified by the benefits gained.

There are three existing inter-state highways in the Newark area: State highway 25 which extends through the southern and eastern part of the City to the Pulaski Skyway leading to the Holland Tunnel. This is essentially a by-pass route for through traffic along the Eastern Seaboard. Access to the City is provided at several points such as Raymond Boulevard, Broad Street and McCarter Highway.

State highway 27 is located south of the City and joins Highway 25 at an interchange near Newark Airport. This highway is also a by-pass leading traffic destined for New York from the west around the main part of the city.

State highway 6 is north of Newark and provides access to the George Washington Bridge and Lincoln Tunnel for traffic originating west and north of the City.

It is significant to note that none of the above three interstate highways connect directly with the center of Newark.

A fourth interstate highway is planned in the Newark area to replace highway 25. The proposed new highway is known as State Highway 100 and is planned to run parallel to Route 25 from the southern part of the State to Newark. This new highway will conform to inter-state highway standards and is planned to connect with the Lincoln Tunnel. It would cross the Newark Meadows between the Airport and the Seaport and would reach a proposed future interchange structure in the Kearny meadows, north of the Passaic River.

The Principal need in Newark for new highways is adequate connections to the system of inter-state highways described above. before more by-passes are constructed, facilities should be provided for traffic to reach the center of the city in a free and expeditious manner. To accomplish this purpose the plan provides for two future freeways:

The first of these proposed highways consists of the extension of Route 25 -A from the proposed new William A. Stickel Memorial Bridge across the Passaic River to a connection with Northfield Road in West Orange. This improvement has been under discussion for some time. It is more fully described in another chapter of this report. Plate 9 shows the proposed location and design of the highway between the new Bridge and the western corporate limits, and Plate 11 shows the entire route extending through Newark, East Orange and Orange. This is one of the most important improvements proposed in the Major Street Plan, and its early construction by the State Highway Department is urgently needed.

A somewhat similar facility is planned in the southeastern part of

the City for traffic interchange between downtown Newark and the south-western suburbs such as Irvington, Maplewood, Millburn, Summit, Springfield, etc. No attempt has been made to recommend a definite location for this proposed freeway, but it generally should parallel Springfield Avenue (State Route 24) from a point in Maplewood to a point near Berger Street where it would proceed in an easterly direction parallel to Kinney Street to a connection with McCarter Highway. This proposed facility would be a grade separated thoroughfare partially elevated and partially depressed depending on the topography. Connections to the freeway should be provided at points where crosswise major thoroughfares intersect. Connections to streets leading to the central business district of Newark are shown on Plate 8.

There are two other highway routes which are classified as connections to the inter-state highway system. McCarter Highway when completed will extend along the Passaic River from the north to a connection with Route 45-A at the new Bridge and to Route 29 and Route 25 at the Newark Airport interchange. This improvement will not be in the form of a freeway but will be on the surface except for that portion which is elevated over the Pennsylvania Railroad tracks south of Pointer Street. Part of the highway has already been constructed by the State Highway Department and its completion is scheduled for an early date. The proposed improvement includes widening of the roadway along that portion of the highway which parallels the Pennsylvania Railroad elevated tracks from Pannier Street to Lafayette Street and the widening of the highway north of Clay Street to a connection with Highway 7 north of the city.

The other connection to the interstate system is the proposed Route 4 Parkway extending from the southern part of the State through Newark to Route 6 north of the City. A definite location for this highway has not yet

and the main and two alternate routes are shown on the plan.

The first of these routes would utilize Oraton Parkway to Irvington, Newark and East Orange, while the alternate route is west of Newark and is not shown on the plan. This proposed improvement is to be a limited access parkway having a wide attractively landscaped right-of-way. It is designed to facilitate the movement of traffic from north to south across the State. It will intersect the principal radial highways leading into Newark and will serve as the by-pass route for north and south traffic not wishing to enter the central part of the City. As the proposed parkway would require a wide right-of-way, the Oraton Parkway location is suggested as one which would reduce the loss in retarding to a minimum. Studies in East Orange have indicated that this route is the best one from the standpoint of that community, but the State Highway Department has not yet made a final decision in the matter.

Radial Routes:

(1) Frelinghuysen Avenue - Astor Street. This route enters Newark from Elizabeth connecting to Newark Avenue or State Highway 17 in that city. Frelinghuysen Avenue has a capacity of 8 lanes of traffic from the city limits to Alpine Street. Between Alpine Street and Sherman Avenue, the present width is 75 feet or 6 lanes. Building lines should be established along this portion of the street for its eventual widening to 100 feet. Frelinghuysen Avenue now terminates at Sherman Avenue. Astor Street which connects Frelinghuysen Avenue with High Street is a narrow 50 foot wide street, one-way south. The southeast corner of Clinton Avenue and Astor Street should be cut back to straighten out the offset now existing at High Street, and Astor Street should be widened to 100 feet between Clinton and Sherman Avenues.

(2) Elizabeth Avenue. This thoroughfare enters Newark from the south, connecting with Broad Street in Hillside. It now has a capacity for 8 lanes of traffic between the City limits and Clinton Avenue which is sufficient, and no widening is required.

(3) Clinton Avenue. Clinton Avenue is an important relief route for Springfield Avenue with which it connects in Irvington. It has a present capacity of 6 lanes from the City limits to Elizabeth Avenue and a capacity of 8 lanes from Elizabeth Avenue to Broad Street. No widening is required.

(4) Broad Street - Broadway. This is one of the most important radial routes of the City as it leads directly to the heart of the business district, both from the north and south. Beginning at a connection with Highways #29 and #25 on the south, Broad Street extends northward to the City limits connecting with Washington Avenue in Belleville. Fortunately when Broad Street was laid out it was given a generous width and no widening is necessary. Likewise, except for a relatively short distance, Broadway also has adequate width, but between Seventh Avenue and Clark Street the width decreases from 100 to 66 feet, and between Clark Street and Fourth Avenue, it is only 66 feet or 4 lanes in width. Between Fourth Avenue and Taylor Street, the width varies from 66 to 100 feet. Building lines should be established on Broadway between Bloomfield Avenue and Taylor Street for an eventual widening to 100 feet. Between Bloomfield Avenue and Seventh Avenue a serious bottleneck exists which should be eliminated at the same time Bloomfield Avenue is widened. Broadway is a County highway north of Bloomfield Avenue, and that portion between Bloomfield and Broad Street should be taken over by the County so that the contemplated widening of

Bloomfield Avenue and the widening of Broadway from Bloomfield Avenue to Seventh Avenue could be carried out in one operation. Because of the alignment of the street at that location, the future widening should take place on the east side of Broadway.

(5) Springfield Avenue. This is one of the most important entries into the City as it connects with State Highway Route 24 and leads to the suburban communities of Irvington, Maplewood, Summit, Springfield, Millburn, and others. In Irvington, Springfield Avenue is a County highway. From the Newark city limits to Morris Avenue, the street has a right-of-way width of 85 feet. From Morris Avenue to South Orange Avenue, it is only 66 feet wide and can accommodate only 2 lanes of traffic. The construction of the proposed Route 24 freeway, described previously in this chapter, will obviate the necessity of widening Springfield Avenue which would be an extremely expensive operation as the frontage is almost compactly developed with business property built out to the street lines. From the point of junction with South Orange Avenue to Market Street, a serious bottle neck exists which should be eliminated regardless of whether the proposed freeway is constructed or not. This portion of the street should be widened from 66 feet to 100 feet. Building lines should be established between Morris Avenue and South Orange Avenue to provide for a future 80 foot width.

(6) South Orange Avenue. Leading directly to the heart of Newark from the west, South Orange Avenue is a highly important entry. Fortunately it has a width of 80 feet or 6 lanes from City limits to Ninth Street, but east of Ninth Street the width decreases to 66 feet and in some places is only 60 feet. While this portion of the street need not be immediately widened, building lines should be established from Littleton Avenue to Springfield Avenue to provide for an eventual 80 foot right-of-way width. The

proposed Route 24 freeway will relieve this street of much of its traffic and a future 80 foot width throughout its length would be sufficient. South Orange Avenue is a County Highway throughout its length, except for a short portion extending through South Mountain Reservation which is under control of the Essex County Park Commission.

(7) Central Avenue - Park Place - Centre Street. Central Avenue provides a direct route from the Oranges to the Newark business district and its location makes it one of the most strategic radial routes in the area. The street is a County highway from High Street west and has a 6 lane capacity from High Street to West Market Street and 8 lane capacity from that point westward. Unfortunately between High Street and Broad Street there is only a 2 lane capacity and as this street acts as a distributor for traffic in and out of the business district, it is important that more capacity be provided between High Street and Broad. It is recommended that a building line be established along the north side of Central Avenue to provide the eventual widening of the thoroughfare to 80 feet west of Broad Street. Park Place and Centre Street form a part of this route connecting with Mulberry Street. The present intersection of Centre Street, Mulberry Street and McCarter Highway creates a dangerous situation because of the multiplicity of conflicting traffic movements through the intersection. It is proposed to remedy this situation by providing a new connection between Centre Street and Mulberry Street to the south of the present intersection. This improvement together with the widening of Central Avenue from High Street to Broad Street is shown in more detail on Plat 8 (Improvements in the Central Business District).

(8) West Market Street and Market Street. West Market Street and Market Street connect to make a diagonal thoroughfare leading from Orange Street near the East Orange line directly to the heart of the Newark business

et. n and to Raymond Boulevard at a point east of the Pennsylvania Railroad. The route varies greatly in width, ranging from 66 feet to 99 feet. New railroad lines should be established along West Market and Market Streets to provide for eventual widenings to 80 feet as follows:

Orange Street to Hudson Street
High Street to Colden Street
Van Buren Street to Madison Street
Somme Street to Perry Street

(9) Orange Street. Orange Street in Newark and Main Street in East Orange and Orange is an important thoroughfare which varies in width, but in Newark it has a 4-lane capacity from the City limits to Broad Street. In view of the fact that this thoroughfare parallels the proposed Route 25-A freeway, no widening will be necessary. The street is occupied throughout most of its length by the double track car line of the Public Service Company.

(10) Bloomfield Avenue. This is a very strategically located diagonal route connecting Newark with the north-western suburbs of Montclair, Verona and other communities. Its continuation northwest from Verona is State Highway 23. It is presently a county highway throughout its entire length. The early widening of this street from its present width of 60 to 100 feet is advisable and plans are now under consideration by Essex County to undertake this improvement as a postwar project. It is planned to widen the street from a point where the Public Service street railway tracks enter west of Branch Brook Park to its intersection with Broad Street. As stated previously in this chapter, it is highly important that the widening include that portion of Broadway from Bloomfield Avenue to Seventh Avenue as otherwise there would be a serious bottleneck at the entrance of the Newark business district.

(11) Raymond Boulevard - Lock Street - Nesbitt Street. The

improvement of Raymond Boulevard a few years ago opened up an entry to the business district from the west. Unfortunately the improvement was not carried beyond Lock Street and there are no adequate connections from that point to the west and north. Nesbitt Street was widened at the time the Newark Housing Authority developed the James Baxter Terrace housing project and the City has acquired some property for the widening of Lock Street between Newark Street and Central Avenue. It is proposed to make Raymond Boulevard a continuous high speed traffic route from the Clifton Avenue traffic circle to be constructed as part of the Route 25-A freeway. This improvement involves the completion of the widening of Lock Street from Sussex Avenue to New Street and the separation of grades at Central Avenue by means of an over-pass on Lock Street at that location. (See Plate 9, This improvement would open up a direct entry to the center of the Newark business district from the western suburban communities. Another improvement which should be made is the re-routing of the present Subway line which comes to grade at the intersection of Warren Street to Raymond Boulevard, crossing Raymond Boulevard at that point. It should be feasible to abandon that part of the Orange Subway line between Raymond Boulevard and Warren Street and Central Avenue, utilizing the existing subway through Central Avenue and hence west of Market Street where facilities now exist for turning into Market Street at that point. Raymond Boulevard has ample capacity from Warren Street through the business district except between Plans Street and Broad Street. Here the street narrows down to a lane capacity and because of existing buildings it will be impossible to increase its width. For that reason it is most important that the Route 25-A freeway be extended eastward through Harrison to make a continuous thoroughfare for traffic between the Oranges and the Lincoln Tunnel in New York. If

his traffic were diverted at the Clifton Avenue traffic circle to Raymond Boulevard by way of Nesbitt and Lock Streets there would be an intolerable situation in the business district and it might be necessary to provide some form of double-deck streets to accommodate such traffic. Obviously, this would be an extremely expensive and complicated structure.

Raymond Boulevard is the principal entry to the center of the City from the east and a connection to the Pulaski Skyway provides direct access to the Holland Tunnel. It is proposed to improve this part of Raymond Boulevard by utilizing the old bed of the Morris Canal as an additional roadway between Lockwood Street and the point where Raymond Boulevard and Market Street merge. In addition to providing future needed traffic capacity this improvement would create an attractive entrance to Newark from the east as it would be combined with the improvement of our river front along a portion of the route. Details of the plan are shown on Plate 17. Another situation which needs correction is the connection to the Pulaski Skyway for eastbound traffic entering from Raymond Boulevard and Ferry Street. This traffic now uses Bondry Street and crosses under the Pennsylvania Railroad by means of a very narrow underpass. A number of years ago, plans were developed by the City Engineering Department to widen this underpass, but for some reason the improvement never was done. The State Highway Department should be urged to complete this improvement at an early date.

(1.) Wilson Avenue. Wilson Avenue extends from Doremus Avenue near Port Newark to a connection with Ferry Street at Pulaski Street. There is a great deal of heavy industrial traffic on this street and its present width of 66 feet should eventually be increased to 80 feet. The new building lines for this future improvement should be established now.

(13) Ferry Street. This street parallels Raymond Boulevard through the Ironbound Section and has a present width of 66 feet except between McWhorter and Market Streets where it widens to 80 feet. Building lines should be established from Raymond Boulevard to McWhorter Street to provide for an eventual widening to 80 feet.

East - West Crosstown Routes

(1) Chancellor Avenue. This street extends in an east and west direction from Springfield Avenue in Maplewood to Elizabeth Avenue in Newark. The entire street is a County highway and in Newark it has a right-of-way width of 80 feet. No widening is necessary.

(2) Nye Avenue - Watson Avenue - New Connections - Meeker Avenue.

This route is designed to furnish east and west crosstown service to Prolinghaysen Avenue and Route 27 through the southern part of the City and from points west and southwest of the City. The route is not continuous at the present time and two new connections will be necessary to make it complete. One of these connections is from the present terminus of Nye Avenue at Seymour Avenue to a connection with Watson Avenue at Barron Street. The other new connection is between Watson Avenue and Meeker Avenue extending from Midwood Avenue to Elizabeth Avenue. The streets comprising this route vary in width from 60 to 66 feet and new building lines should be established for eventual widening to 80 feet. The two new connections should have a right-of-way width of 80 feet when they are built.

(3) Avon Avenue. Avon Avenue lies between Clinton Avenue and Springfield Avenue and extends from Springfield Avenue to a connection with Clinton Avenue at Elizabeth Avenue. The street now has a right-of-way width of 80 feet which is sufficient.

(4) Park Avenue - Crittenden Street. Park Avenue is a 120 foot thoroughfare under the control of the Essex County Park Commission. From Main Street in West Orange to Lake Street in Newark no commercial traffic is permitted in this section of the street but it is intensively used by passenger vehicles. It is one of the most important thoroughfares in the City. The street has a restricted capacity due to the wide grass plots and tree plantings, and the stopping and parking of automobiles along the traveled roadway. This situation is more pronounced in East Orange and Orange than in Newark and suggestion have been made by the East Orange Planning Board that parking facilities be provided off the traveled roadway to relieve the present congestion. Park Avenue now terminates at Bloomfield Avenue but there is considerable traffic between that point and Broadway utilizing Crittenden Street. This is at present a narrow thoroughfare which should be widened to 80 feet between Bloomfield Avenue and Broadway. Park Avenue is a County highway from Lake Street to Bloomfield Avenue.

(5) Second Avenue. Second Avenue furnishes connection to Rutledge Avenue in East Orange and its eventual extension to Springdale Avenue. Second Avenue now terminates at Third Street in Newark and there should be a better connection afforded Bloomfield Avenue at this point. This can be done by cutting back the northwest corner of Second Avenue and Third Street. Second Avenue continues on the east side of Branch Brook Park to Broadway and because of its connection with the park drives it carries much traffic. The present width of Second Avenue is 60 feet and no widening is required.

(6) Heller Parkway. Heller Parkway extends from Summer Avenue westward across Branch Brook Park connecting with Franklin Street in Bloomfield. From the city limits to Forest Hill Parkway the right-of-way is 80 feet and

from Forest Hill Parkway to Highland Avenue 150 feet. From Highland Avenue to Mt. Prospect Avenue, the right-of-way is 80 feet. No widening is required.

(7) South Street - Delancey Street. These two streets constitute one of the most important crosstown routes in the eastern part of the City. Inasmuch as there is a large amount of commercial and industrial traffic using the streets the present widths of 60 and 64 feet should be increased to 80 feet by establishing new building lines for future widening. South Street now terminates at Pennsylvania Avenue where it intersects Brunswick Street. In order to reach Clinton Avenue, the traffic is forced to use a rather narrow and discontinuous street in this area. It is recommended that a new connection 80 feet in width be provided from the intersection of Pennsylvania Avenue, Brunswick Street and South Street to Clinton Avenue at Washington Street.

North - South Crosstown Streets

(1) Belmont Avenue, Jones Street, Norfolk Street, Clifton Avenue, Mt. Prospect Avenue. Potentially, this is one of the most important highway routes in Newark as it extends continuously almost across the entire width of the City, connecting Belleville on the north to Elizabeth Avenue near Weequahic Park. Parts of the street comprising this route have already sufficient width but there are certain other improvements that should be made in the near future. Clifton Avenue extends from Orange Street to Verona Avenue where it dead-ends. It is highly desirable to connect Clifton Avenue with Mt. Prospect Avenue at Bloomfield Avenue in order to remove heavy traffic from the residential section along Clifton Avenue in Forest Hill and provide a continuous route to Belleville. This improvement should be made at the same time Bloomfield Avenue is widened and the entire route should be turned over to Essex County for improvement as a County highway. No widening is

needed from the north City limits to Orange Street as the existing right-of-way now is from 7' to 10' feet which is sufficient to accommodate 2 lanes of traffic. Norwalk Street between South Orange Avenue and Orange Street is widened to 8' feet. Jones Street and Belmont Avenue, between South Orange Avenue and West Fiddler Street now has a width sufficient to accommodate 1 lane of traffic and no widening is necessary. 80 foot building lines would be established on Belmont Avenue between Federal Street and Watson Avenue where Belmont Avenue will connect with the proposed new connection between Watson and Mosker Avenue described previously. An important part of this improvement is the proposed traffic circle at Clifton Avenue and Eighth Avenue which will permit traffic originating from the north and west area either to proceed westerly over the bridge approach or proceed directly to Raymond Boulevard over an improved Nesbitt Street and Lock Street.

(2) Bergen Street, First Street, Proposed Highway over the Morris Canal, Franklin Street. This route will provide a continuous north and south highway from Belleville to Hillside in addition to acting as a crosstown route. Utilization of the Morris Canal right-of-way along the west side of Branch Brook Park will provide a high speed highway intersecting street entering Newark from the north and northwest and will enable traffic to reach the center of the City with a minimum of interference from cross movements. It is proposed to construct a roadway having a capacity of 6 lanes over the subway now occupying the bed of the Morris Canal from the present terminus of First Street near Seventh Avenue to Heller Parkway where a new connection would be built to Franklin Street. Access to this proposed highway would be provided at Park Avenue, Bloomfield Avenue and Heller Parkway and it should be paralleled by a local service street along the west side of the highway. The carrying out of this improvement would encourage the development of stagnant and rundown property near the highway, thus adding greatly to the

taxable values in the vicinity. West of the route south of Seventh Avenue, a capacity of 4 lanes is required from Lyons Avenue to Jenner Avenue, Jenner Street is 8 feet wide and from Hawthorne Avenue to Waverly Avenue it is 10 feet wide. No widening will be required along these sections but building lines should be established along the rest of the route to provide an average 60 foot width.

(3) High Street. High Street acts as a north and south cross street from Bloomfield Avenue to Clinton Avenue and also serves as a by-pass around the central business district. Due to its strategic location, the street should have an eventual capacity of 8 lanes of traffic. At present the street has sufficient width between Jenner Street and Clinton Avenue but new 100 foot building lines should be established along the remainder of the thoroughfare. That portion of the street from Bloomfield Avenue to the Lackawanna Railroad should be widened in connection with a proposed housing project.

(4) South Eighth Street, Roseville Avenue. Roseville Avenue is an important cross-town street connecting Bloomfield Avenue with West Market Street. The present width is sufficient to accommodate 6 lanes of traffic and no widening is needed. South Eighth Street, which is a continuance of Roseville Avenue extends southward from West Market Street to South Orange Avenue where it dead-ends at the water reservoir. It has a present capacity of 4 lanes which is sufficient between South Orange Avenue and Central Avenue, but wider building lines should be established along the block between Central Avenue and Ninth Avenue where Eighth Street joins Roseville Avenue.

(5) Alaina Street, Clinton Place, South Thirteenth Street, New Connection, South Twelfth Street. This route extends from the southern City

limited to West Market Street but that portion of Twelfth Street between Central Avenue and West Market Street is not designated as a major thoroughfare. The streets comprising the route vary in width from 5 to 6 feet and 8 feet. Wider building lines should be established along the entire route. A new connection is needed between South Thirteenth Street where it terminates at Woodland Avenue and South Twelfth Street in the block just south of Springfield Avenue.

(6) Grove Street. Grove Street is an important north and south County highway, a comparatively short portion of which exists in Newark. Its present right-of-way width of 50 feet should be increased to 80 feet by establishing new building lines along that portion of the thoroughfare which lies in Newark.

(7) Alexander Street. Alexander Street in Newark is a connecting link between a proposed crosstown route through East Orange and Irvington. The street connects with Valley Street and Orange Avenue in Irvington and to Hillcrest Terrace in East Orange. Its present width of 50 feet will accommodate 4 lanes of traffic but 60 foot building lines should be established for eventual widening.

(8) Sandford Avenue. Sandford Avenue is a County highway having a present width of 60 and 66 feet in Newark. It is part of a proposed crosstown route through East Orange, Newark and Irvington extending to Springfield Avenue. 80 foot building lines should be established along that portion of the thoroughfare in Newark.

(9) Pulaski Street - Merchant Street. Pulaski Street is a north and south crosstown route connecting Lafayette Street with South Street through the Ironbound section. The present capacity of 4 lanes is sufficient. Pulaski Street connects with Merchant Street at Lafayette Street

which intersects Wilson Avenue and Ferry Street.

Miscellaneous Improvements

(1) New High Level Bridge Replacing Jackson Street Bridge.

The present Jackson Street Bridge is a low level structure which has reached an age where its maintenance is costly. Eventually it should be replaced by a high level bridge which will connect Fourth Street in Harrison with Wilson Avenue in Newark. This structure should extend over Raymond Boulevard, Market Street, the Central Railroad of New Jersey and come to grade in the vicinity of the intersection of Market Street, Wilson Avenue and Merchant Street. Means should be provided for traffic to leave and enter the bridge at Market Street, details of which are shown on Plate 1C.

(2, Washington Street, Mulberry Street. These streets are all located in and near the central business district and their proposed improvements are discussed in the chapter of Street Improvement in the Central Business District.

CENTRAL BUSINESS DISTRICT

CENTRAL BUSINESS DISTRICT

The importance of providing adequate vehicular access and parking facilities in the Newark Central Business District has been emphasized throughout this report. The area has more significance than a place where shopping is done and business is transacted. It is a major source of tax revenues and the city's financial welfare depends to a large extent on the strength and stability of downtown business values. While no figures are available in Newark the central business districts of other large municipalities all show a tax return far greater than the cost of providing public services and this excess of income over expense offsets the losses which take place in the slums and blighted districts where costs of public services far outweigh the amount of tax collected.

The prosperity of the Newark business district is dependent not only on trade engendered within the corporate limits but also upon that coming from the suburban areas. Unless it is possible for persons to reach the center of the city conveniently and after arriving there find a place to park near where their business is to be transacted, these persons will patronize other more accessible shopping centers and eventually there will be a decline in values within the central areas. In order to protect the large investments now present in downtown Newark, the City is justified in expending relatively large sums for improvements. In the long run, it will be cheaper to do this than to suffer the inevitable blight and loss in values that will occur if a policy of laissez-faire is followed.

Traffic Entering and Leaving the Downtown Area.

Plate 6 has been prepared to show the number of vehicles that daily enter the Newark Central Business District. Counts were taken in 1937 by

TABLE I

TRAFFIC ENTERING AND LEAVING CENTRAL BUSINESS SECTION

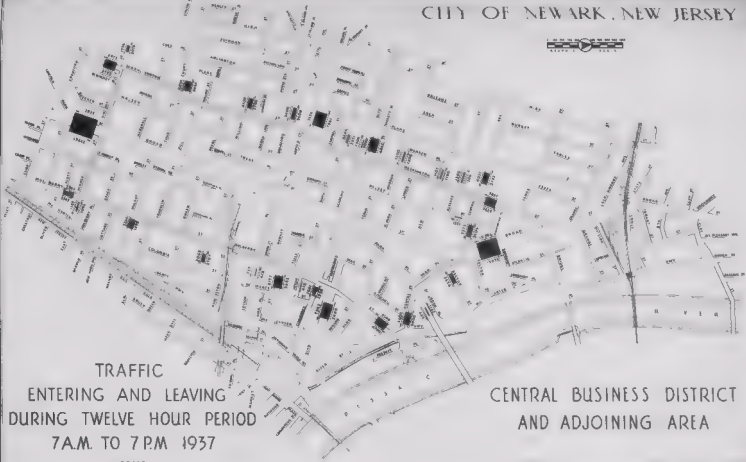
7:00 A. M. to 7:00 P. M. 1937

Intersection	Entering	Leaving	Total
Broad & Kinney	13,662	12,923	26,585
Mulberry & Kinney:			
Kinney	1,092	1,185	2,277
Mulberry	2,345	2,761	5,106
Mulberry & Walnut	1,598	5,224	6,822
Mulberry & Lafayette	2,707	2,069	4,776
Mulberry & Edison	418	718	1,136
Mulberry & Market	5,682	5,777	11,459
Mulberry & Clinton	-	418	418
Mulberry & Commerce	2,238	1,681	3,919
Mulberry & Raymond	5,480	7,542	13,022
Mulberry & Centre:			
Mulberry	5,300	4,700	10,000
Centre	4,000	5,000	9,000
Centre & Saybrook	1,160	1,023	2,183
Broad & Central	10,206	13,055	23,261
Washington & Central:			
Washington	5,855	5,623	11,478
Central	4,057	3,752	7,809
Washington & Bleecker	1,200	1,200	2,400
Washington & New	1,107	1,100	2,207
Washington & Warren	1,200	1,200	2,400
Washington & Raymond	5,040	6,840	11,880
Washington & Academy		1,500	1,500
Washington & Bank	2,351		2,351
Washington & Market	7,556	7,961	15,517
Washington & Branford	2,400	2,400	4,800
Washington & William	2,100	2,500	4,600
Washington & Court	4,824	3,466	8,290
Washington & Kinney:			
Washington	6,198	5,972	12,170
Kinney	1,774	2,075	3,849
Total	101,550	109,765	211,315

SUMMARY

From	Entering	Leaving	Total	Percent
North	21,361	23,378	44,739	21.20
South	22,205	21,656	43,861	20.80
East	24,375	30,737	55,112	26.00
West	33,609	33,994	67,603	32.00
	101,550	109,765	211,315	100.00

CITY OF NEWARK, NEW JERSEY



TRAFFIC
ENTERING AND LEAVING
DURING TWELVE HOUR PERIOD
7 A.M. TO 7 P.M. 1937

CENTRAL BUSINESS DISTRICT
AND ADJOINING AREA

SCALE
IN THOUSANDS OF CARS



CENTRAL PLANNING BOARD OF
NEWARK, N.J. 1937

HARLAND BARTHOLOMEW & ASSOCIATES
CITY PLANNERS

the Department of Public Safety in connection with a city-wide traffic survey of all vehicular traffic entering and leaving the business district between 7 A.M. and 7 P.M. of a typical week-day. For the purpose of this study, the business district was defined as the area bounded by Kinney Street, Washington Street, Central Avenue, Park Place, Centre Street and Mulberry Street.

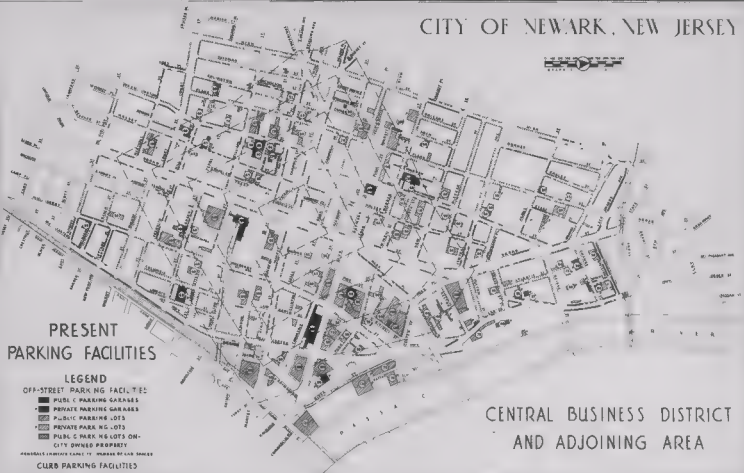
During the day, a total of 211,000 vehicles entered and left the downtown district. 32 per cent entered and left from the west; 26 per cent entered and left from the east; 21 per cent entered and left from the north; while 21 per cent entered and left from the south. Table 1 shows the volume of each of the intersections on the perimeter of the business district and summarizes the totals from all directions.

Inasmuch as the bulk of the population of Newark and its suburbs is to the west of Broad Street traffic in and out of the business district is greatest from that direction. Market Street, Central Avenue, Court Street and Raymond Boulevard are the principal entries from the west with Market Street carrying the heaviest traffic.

Broad Street is the dominant entry for both north and south traffic. From the north more than 50 per cent of the traffic entering and leaving the district uses Broad Street. From the south more than 60 per cent uses Broad Street. Raymond Boulevard and Market Street handle approximately the same amount of traffic and between the two of them, accommodate a little less than one-half the total traffic entering and leaving from that direction.

From the above figures it is evident that Broad Street should be relieved of some of its burden by improving other entries from the north and south. A more even distribution of traffic throughout the business district will create a better balanced development and increase values in areas away

CITY OF NEWARK, NEW JERSEY



PRESENT PARKING FACILITIES

LEGEND

OFF-STREET PARKING FACILITIES

- PUBLIC PARKING GARAGES
- PRIVATE PARKING GARAGES
- PUBLIC PARKING LOTS
- PRIVATE PARKING LOTS
- PUBLIC PARKING LOTS ON CITY OWNED PROPERTY

NUMBERS INDICATE CAPACITY NUMBER OF LADY SPACES

CURB PARKING FACILITIES

- UNRESTRICTED
- METERED (ONE HOUR LIMIT)
- NO PARKING
- METERED (ONE HOUR LIMIT)

500 FOOT WALKING & STANCE ZONES FROM
ROAD AND MARKET

CENTRAL BUSINESS DISTRICT AND ADJOINING AREA

CENTRAL PARKING BOARD OF
NEWARK, NEW JERSEY

MAP AND PARKING CHART BY KINCHADY
P. F. FARRER

from Broad and Market Streets which are the dominant business thoroughfares. Greater use of all possible entries would permit a more direct flow toward particular objectives, thereby minimizing unnecessary movement and turning within the district.

Parking Facilities.

Plate 7 shows present parking facilities within the Central Business District and adjoining areas. Information shown on this drawing was secured by a field survey covering all off-street and curb parking facilities. Another survey will be made shortly for the purpose of ascertaining the parking habits and desires of shoppers patronizing Newark's downtown retail stores and another survey will be made to determine the parking requirements of persons working in downtown Newark who park their cars all day or who use their car during the day and drive in and out. From the results of these pending studies, it will be possible to more adequately appraise the parking plans proposed in this report and it may be desirable later to make some revisions or modifications. With the rapid return of normal driving it was deemed advisable not to delay the report until completion of the surveys described above.

Off-Street Parking Facilities.

The area covered in the curb and off-street parking survey is bounded by Kinney Street on the South, High Street on the West, the Lackawanna Railroad on the North and the Passaic River and Pennsylvania Railroad on the East. Differentiation was made between lots and garages open to the public and those used only by employees of the firms operating the facilities. On the drawing there are five classes of facilities shown by different

TABLE 2

EXISTING OFF-STREET PARKING FACILITIES
IN THE CENTRAL BUSINESS DISTRICT

Zone No. (1)	Number of Car Spaces Provided				Total
	Public Parking Lots	Public Parking Garages	Private Parking Lots (2)	Private Parking Garages (2)	
1	255	0	10	0	265
2	757	525	0	0	1,282
3	1,499	765	59	65	2,388
4	2,520	815	387	26	2,748
5	1,054	239	664	368	2,325
Totals	6,085	2,544	1,120	459	10,008

(1) Zone No. 1 is area within 1000 feet walking distance of Broad and Market Streets. Each succeeding zone is an additional 500 feet.

(2) Private parking lots and garages are those provided for employees only and in which the general public is excluded.

garages: There are: (1) public parking lots, (2) public parking garages, (3) private parking lots, (4) private parking garages, and (5) public parking lots on city-owned property.

As shown by Table 2, there are a total of 16,088 car spaces provided in off-street public and private parking lots and garages. There are 84 public parking lots providing 6,885 car spaces or an average of 73 car spaces per lot; 18 public garages provide 2,344 car spaces, or an average of 130 car spaces to each garage; 51 private parking lots provide 1,120 car spaces or an average of 22 cars per lot, while there are 11 private garages accommodating 457 cars or an average of 41 cars per garage. There are four lots operating on city-owned property and one garage (the Centre Market).

For the purpose of determining the proximity of existing parking facilities to the center of the business district (Broad and Market Streets 500 foot walking zone from that point are shown on the drawing. (Zone One extends for 1,000 feet from Broad and Market). It will be noted that there are very few facilities in the first zone where property is intensively developed and has a high value. The numbers progressively increase in the second, third and fourth zones and decrease beyond the fourth zone.

Curb Parking Facilities.

Table 3 is a summary of the available curb parking spaces, differentiated between those in unrestricted areas, one-half and one hour metered areas and one hour unmetered areas. It is interesting to note that no parking is permitted on more than fifty per cent of the total curb frontage.

A total of 5,128 car spaces are provided along the curbs of which 1,854 spaces are limited to one-half or one hour and 1,274 spaces are unrestricted.

TABLE 3

EXISTING CURB PARKING FACILITIES
IN THE CENTRAL BUSINESS DISTRICT
NEWARK, NEW JERSEY

Zone No.		Number of Car Spaces Provided				
	Unrestricted Parking	One-Hour Metered Parking	One-Half Hour Unmetered Parking	One-Hour Unmetered Parking	Other Parking	Total
1	5	151	18	16	-	190
2	7	259	1	70	4	341
3	71	246	-	221	9	547
4	196	243	-	531	27	997
5	995	258	-	1,719	81	3,053
Total	1,274	1,157	19	2,557	121	5,128

Note: There is a total of 223,801 lineal feet of curb parking space in the central business district of which there are 120,796 lineal feet where no parking is permitted at any time.

There is a total of 15,136 car spaces provided both in off-street and curb parking facilities. Total estimated daily capacity of all spaces is as follows:

<u>Type of Space</u>	<u>Space Available</u>	<u>Estimated 8-hour capacity</u>
One hour metered	1,157	5,785
One-half hour unmetered	19	160
One hour unmetered	2,557	10,228
Unrestricted	1,274	1,500
Garages	2,803	4,200
Parking Lots	7,205	10,807
Other curb parking	<u>121</u>	<u>250</u>
	15,136	32,930

The above estimates are based on turnovers ranging from 5 per day in the case of metered one-hour parking zones to $1\frac{1}{2}$ per day in the case of off-street parking garages and lots. The estimated 8-hour capacity is approximately 25 per cent of the number of vehicles entering the business district daily. While there is no data available on the number of cars entering the area that go on through and do not wish to park it is believed that approximately 50 per cent or 50,00 of the vehicles would park if space were available. This indicates a serious deficiency in parking space which will become worse as traffic increases in the postwar years.

Future Parking Space Requirements.

Table 4 is a comparison of parking facilities provided in 10 large American cities including Newark. Existing car spaces per 1,000 population of the city vary from 9.3 in Chicago to 58.6 in Dallas. Car spaces per 1,000 population in the metropolitan area range from 7.0 in Chicago to 45.8 in Dallas. Newark compares favorably with the other cities from the standpoint of car spaces per 1,000 city population, being excelled only by Dallas and San Francisco. Newark is deficient in comparing car spaces per 1,000

TABLE 4
ANALYSIS OF EXISTING PARKING FACILITIES
IN THE CENTRAL BUSINESS DISTRICT
OF
TEN LARGE AMERICAN CITIES

		Population 1940		Number of Existing Parking Spaces				Existing Parking Spaces Per 1,000 Population	
		City	Metropolitan Area	Garages	Lots	Curb	Total	City	Metropolitan Area
1	Newark	429,760	1,249,000 (1)	2,803 (3)	7,205 (4)	5,128	15,136	35.4	12.1
2	Boston	770,816	2,350,514	6,300	6,305	4,000	16,605	21.5	7.1
3	Chicago	3,396,808	4,499,126	11,175	16,345	3,959 (2)	31,479	9.3	7.0
4	Cleveland	878,336	1,214,943	9,000	16,000	2,500	27,500	31.3	22.6
5	Dallas	294,734	376,548	8,169	6,721	2,349	17,239	58.5	45.8
6	Detroit	1,623,452	2,295,867	7,000	24,200	4,835	36,035	22.2	15.7
7	Los Angeles	1,504,277	2,904,596	11,452	28,008	6,250	45,710	30.4	15.7
8	Philadelphia	1,931,334	2,898,644	7,764	13,919	4,800	26,483	13.7	9.1
9	San Francisco	634,536	1,428,525	11,595	6,205	4,800	22,600	35.6	15.8
10	Saint Louis	816,048	1,367,977	6,795	11,469	5,639	23,873	29.3	17.5

(1) Includes all of Essex and Union Counties, Lyndhurst and North Arlington in Bergen County and East Newark, Harrison and Kearny in Hudson County.

(2) Exclusive of 5,351 Spaces illegally used.

(3) Includes 459 car spaces in private garages.

(4) Includes 1,120 car spaces in private lots.

population in the metropolitan area and is exceeded by Cleveland, Dallas, Detroit, Los Angeles, San Francisco and Saint Louis. It will be noted that cities having rapid transit have a reduced need for parking facilities. These cities include Boston, Chicago and Philadelphia. If these cities are excluded the parking space provided in Newark in relation to the city's population is almost the same as the average of the group (35.4 in Newark compared to the 34.6 average). If these cities are also excluded from the metropolitan area population comparison, Newark falls far short of the average of the other cities (12.1 in Newark compared to 22.2 average).

Obviously it is impossible to apply standards of other cities to Newark in determining the future parking needs, but is significant that most of the cities which provide more parking space in comparison to their population than does Newark consider their facilities inadequate and are making plans to materially increase them.

Assuming that parking requirements have some relationship to future population and to the future number of motor vehicles, a check can be made on the desirable goal to aim for in the future. Table 5 is a summary of the estimated future population of the Newark metropolitan area and the future expected motor vehicle registration in the metropolitan area. Population estimates are based on the Population Report of the Newark Central Planning Board and an estimate prepared by the Regional Plan Association of New York. Future motor vehicle registration was estimated using the following assumptions:

1. That the present ratio of 2.86 persons per motor vehicle in Essex County outside of Newark would decrease to 2.47 persons per vehicle in 1970.

2. That the present ratio of 4.82 persons per motor vehicle in Newark would decrease to 4.00 persons per vehicle in 1970.

TABLE 5

ESTIMATED FUTURE PARKING SPACE REQUIREMENTS
IN CENTRAL BUSINESS DISTRICT

Year	Estimated Population in Metropolitan Area	Estimated Number Motor Vehicles in Metropolitan Area	Estimated Car Spaces			
			Garage	Lot	Curb	Total
1940	1,249,000	354,000	2803	7205	7732	17740
1950	1,366,000	406,000	5300	8000(2)	7000(1)	20300
1960	1,523,000	483,000	7650	10000(2)	6500(1)	24150
1970	1,603,000	533,000	8650	12000(2)	6000(1)	26650

In 1940 there were 50.0 car spaces per 1,000 motor vehicles in Metropolitan Area. Applying this ratio to estimated future motor vehicles gives total number of car spaces needed.

- (1) Gradual reduction in curb parking assumed.
- (2) Number of obsolete buildings removed assumed to be greater than new buildings constructed on vacant sites.

3. That similar reduction in persons per motor vehicle would occur in Union County and the parts of Hudson and Warren Counties included in the Newark metropolitan area.

From Table 5 it is seen that the population of the Newark metropolitan area is expected to increase from its 1940 population of 1,244,000 to 1,500,000 in 1970. This is an increase of 18.4 per cent. Automobile registration is expected to increase more rapidly, i.e., from 354,000 in 1940 to 500,000 in 1970, a increase of 41.5 per cent. As the annual mileage per automobile is expected to increase, the need for vehicular transportation and the demand for parking space will increase faster than indicated in the table. To meet the increasing demand for parking facilities for such an increase will be a serious public responsibility.

The estimated future number of car spaces needed in the Newark Central Business District is shown in Table 5. The spaces are broken down into garages, parking lots and street parking. The facilities needed for garage parking, primarily for the shopping public. It is estimated that present facilities will be replaced from 2,600 to 6,000 in 1970. Parking lots to accommodate both shopping and business spaces are expected to increase from 7,200 spaces to 12,000 spaces in 1970, while curb parking spaces are expected to be reduced as additional "no parking" restrictions are placed on the streets.

Proposed Street Improvement and Parking Plan.

A recommended long-range plan of street improvements and off street parking facilities follows and is shown on Plate 8.

In considering the relationship of the major street plan to the Central Business District there are three factors which must be given consideration.

CITY OF NEWARK, NEW JERSEY



PROPOSED STREET IMPROVEMENTS AND OFF-STREET PARKING FACILITIES

CENTRAL BUSINESS DISTRICT AND ADJOINING AREA

LEGEND

- | | | | |
|--|--------------------------------|--|-------------------------------|
| | PRESENT PARKING LOTS | | PRESENT PARKING LOTS |
| | PROPOSED PARKING LOTS | | PRESENT PARKING LOTS |
| | PRESENT PARKING GARAGES | | OCCUPYING CITY-OWNED PROPERTY |
| | PROPOSED PARKING GARAGES | | |
| | PROPOSED PARKING OR NEW STREET | | |

CENTRAL PLANNING BOARD OF
NEWARK, NEW JERSEY

HARLAND GARDNER & ASSOCIATES,
PLANNERS

First, is the necessity for providing wide and convenient entries to the district from all parts of the residential areas in and near the city. The second factor is that of moving traffic conveniently throughout the central area. Where facilities are available to distribute this traffic evenly throughout the district, congestion is avoided. Finally there must be ample and conveniently located terminal facilities for automobiles having access to the area. Failure to give proper consideration to all these factors may inevitably result in shifting of volume and movement of business to other locations. Traffic movements and parking are closely inter-related. Failure to find a certain space necessitates additional movement which add to the congestion already present.

Another important factor to consider in planning the central area is that of mass transportation. In a city the size of Newark a great many people enter the business district by way of street car or bus to work or shop. The transit lines should run directly and quickly from the residential areas to the business district so that they will encourage additional riding and result in reducing vehicular congestion. Insofar as possible they should be routed through the center rather than around the boundaries of the central area. A later report discusses transit facilities in detail.

A general description of the proposed major street plan has been given in a previous chapter of this report. Plate 2 shows the various improvements proposed for the street system within the central business district.

Route 24 Freeway.

A proposed grade separation thoroughfare generally paralleling Springfield Avenue and Route 24 terminates at McCarter Highway between Chestnut Street and Oliver Street. That portion of the freeway which skirts

the main street would be elevated and would cross over Washington Street, Broadway Street, Center Street, Broad Street and Center Street. The main street would then proceed on all other street and would then to be Carter highway. Main connections would be provided at Washington Street and at other street. Traffic on Washington Street would proceed on the highway. Main street traffic on the highway could reach rail at Washington and Broadway Street where it could go either north or south. Traffic could get on or leave the highway either at Mulberry Street or at Carter highway. No physical connection are planned at Broad Street as it would not be advisable to interrupt the heavy north-south traffic at that point with exit and entrance ramps from the main street. Traffic which to reach Washington or Broad Street could do so very easily either at Washington Street or Mulberry Street. In fact, as no detailed engineering surveys have been made as to the location of this highway, the location shown on the plan is tentative only and subject to change at a later date.

Washington Street - Plane Street:

It is recommended that these two streets be improved to form the distributor street for the west side of the business district. By utilizing the two existing streets for this purpose it will be unnecessary to undertake an expensive widening program on either. In order to make the two streets function properly they should be joined at the southern end of the business district and to accomplish this a connection is proposed from Washington Street and Baldwin Street to Plane Street where it terminates at Court Street. 20 foot building lines should be placed on the east side of Washington Street between Crawford Street and Branford Place to provide for future widening. 20 foot building lines should be established along the east side of Plane Street between Central Avenue and Orange Street.

Court Street:

Court Street is well located to serve as a distributor street along the south edge of the business district. It is proposed to widen this street between Washington Street and Broad Street and remove the offset between Court Street and Court Street at Broad by cutting back the southwest corner of Court Street and Broad Street.

Central Avenue, Park Place, Center Street.

Central Avenue is an important distributor street. Traffic enters the business district from the west on Central Avenue and proceeds to destinations east of Broad Street by means of Park Place and Center Street. Between High Street and Broad Street, Central Avenue has a capacity of only four lanes and it should be widened 20 feet along the north side to increase its traffic capacity to six lanes. It is also proposed to extend Park Place from its intersection with Center Street to a new connection with Mulberry Street between Center Street and Park Street. This proposed connection will enable the westbound traffic from Mulberry Street to avoid the very complicated intersection of McCarter Highway and Center Street.

Mulberry Street:

Mulberry Street is potentially a very valuable part of the City street system because of its strategic location as a distributor street along the east side of the central business district. South of Market Street, because of insufficient width the street has not been able to function properly. North of Market Street the previous widening has given the thoroughfare adequate capacity but this capacity is reduced to two lanes because of the double and triple parking on the street. South of Market Street Mulberry Street should be widened to 100 feet. From Market Street to Hamilton Street the widening should take place on the east side and from Hamilton Street to

Lafayette Street it should take place on both sides.

Lafayette Street to Chestnut Street the west side should be widened.

Although not shown on the plan, the proposed extension of Route 25-A from the new bridge across the Passaic River north of the Lackawanna Railroad provides access to McCarter Highway and Broad Street from the east. The proposed improvement of Lock Street and Nesbitt Street from the Clifton Avenue traffic circle to Raymond Boulevard provides a direct entry to the business district from the west and northwest. These improvements, together with those described above and the improvements recommended for the radial routes leading to the Newark business district will insure maximum accessibility and the well-balanced distribution of traffic in and around the shopping center.

Proposed Parking Facilities:

The proposed parking plan for downtown Newark may be summarized as follows:

1. Supplement present parking lots and garages by providing additional off-street facilities for shoppers and other persons having business in the district in the form of open deck type parking garages located as near the center of retail business as possible.
2. Provide additional facilities for all-day parkers and persons transacting business downtown by means of parking lots located along the distributor streets skirting the edges of the business district.
3. Install additional parking meters on streets convenient to retail shops where unmetered limited time parking is now in effect.
4. Extend "no parking" restrictions on streets where roadway capacity is limited and traffic is heavy.
5. Strictly enforce all parking regulations to insure utilization of off-street facilities and maximum turnover of spaces.

6. License all parking lots and prescribe minimum standards of size, location of entrances and exits, surfacing and fencing.

The number and location of proposed parking garages and lots shown on Plate 8 were determined in accordance with the estimate of future needs outlined previously in this chapter and a careful study of possible sites. The program is designed to be carried out over a twenty-five year period by private enterprise in cooperation with the City. The City's participation in the program should be limited to acquisition of sites and control of their development. By exercising the right of eminent domain sites may be assembled and then leased to private operators under an arrangement that will insure the retirement of bonds issued for the land acquisition and the payment of full taxes. It may be necessary to secure state legislation to authorize such transactions, such as has been adopted in several states in recent years. This legislation should be broad enough to permit the City not only to acquire and lease property to private operators but also to construct and operate its own facilities if private enterprise is unwilling to undertake these needed improvements.

The proposed system of new off-street parking facilities consists of four open-deck three-story parking garages, one two-story underground parking garage and twenty parking lots. The garages would provide 4,440 car spaces and the parking lots 3,360 car spaces, making a total of 7,800 new car spaces. Adding these to the car spaces now available in parking lots, garages and at the curbs, a total of 23,500 car spaces are provided which is approximately the number estimated to be needed in 1960.

Financial Considerations:

A. Military Park Underground Garage.

It is recommended that negotiations be entered into with a private

operator to lease the property for the construction of a two-story underground parking garage that will accommodate approximately 1,400 cars. It is entirely feasible to use the park for this purpose and at the same time preserve its attractiveness as a beauty spot in the downtown area. The park can be restored after completion of the underground construction work as was done in the case of Union Square Park in San Francisco.

The Union Square Garage in San Francisco was privately financed by issuance of preferred stock to the extent of \$680,000 and a loan of \$850,000 from the Reconstruction Finance Corporation secured by a first mortgage on the building. The city was given 100 shares of common stock (the total issue) is paid \$5,000 per year rental and receives \$15,000 annually for taxes. At the expiration of 25 years, when the preferred stock is retired and the loan has been paid off the building becomes the property of the City.

Because of the exceptionally good location of Military Park in respect to retail stores, hotels and office buildings, its use for parking purposes should prove financially sound. Some similar arrangement to that worked out in San Francisco should be undertaken in Newark.

Estimates have been prepared on the cost of acquiring land and constructing the four open type garages at the locations shown on the plans. Estimates have also been made of the annual operating expenses and income. These estimates indicate that the proposed garages can be operated at a profit without public subsidy.

In estimating the costs, three story open-type garages were assumed. Land costs were estimated at assessed value plus fifty per cent while construction costs were estimated at \$1.25 per square foot of floor area. Car capacity was estimated on the basis of 200 square feet of floor per car space.

The following assumptions were made in estimating annual operating and financing costs. Operating on a 24 hour day basis the garages will require 16 employees for each 200 car spaces. Operating expenses, including light, water and heat, will be \$20.00 per car space per year. Taxes at the rate of \$5.16 per one hundred dollar valuation will be paid on the total cost of the building. Amortizing the cost of the improvement in twenty years will require an annual payment equal to 4.12 per cent on the investment. A six per cent return on the investment is assured. Based on these assumptions the annual costs per car space for operating and financing the garages range from \$173.00 to \$177.00. Reduced to cost per car space per day, the range is from \$0.47 to \$0.54.

In estimating annual income to be derived from operating the garages a very conserving turnover of 1.5 per car space per day was used. Rates of \$0.25 for the first hour, \$0.35 for two hours and \$0.70 for all day parking were used. These rates result in an average revenue per car space per day of \$0.57. Conservative estimates were also made on income from sale of gasoline and oil and for washing cars. These estimates indicate that the total annual income per car space per day will be \$0.60 for all garages which is substantially higher than the estimated daily cost per car space of \$0.54.

While no estimates have been made on possible revenues derived from rental of store buildings on the first floor of these structures they are so located that retail shops could occupy the frontage on the principal streets, thus increasing the annual revenues.

DETAILS OF PROPOSED IMPROVEMENTS



Details of Proposed Improvements

NEWARK SECTION OF THE PROPOSED FREEWAY CONNECTING THE STICKEL MEMORIAL BRIDGE AND NORTHFIELD ROAD IN WEST ORANGE

Plate 8 shows the suggested development of the approaches to the new William A. Stickel Memorial Bridge and the proposed freeway connecting to these approaches at Clifton Avenue from the west. The proposed improvement is divided in three parts as follows: (1) the system of ramps connecting the bridge with McCarter Highway and Broad Street, (2) the proposed traffic interchange at Clifton Avenue, and (3) the general location and design of a freeway between Clifton Avenue and the East Orange city line.

The first section of this improvement has been under consideration by the Planning Board since January 1944, and has been the subject of a special report entitled "A Preliminary Report on Plans for the Extension and Enlarged Approaches of the New Passaic River Bridge". A brief resume of this report follows:

Shortly after work had commenced on the comprehensive plan of Newark, the New Jersey State Highway Department released their plans for the new Passaic River Bridge and its approaches on the Newark side. As this improvement was most important to the city of Newark, the Planning Board undertook a study and analysis of the proposed bridge and its approaches to determine how they would fit in with the city's plan for traffic and future streets improvements.

This analysis indicated that there were a number of important matters which require close study on the part of the Planning Board. These were concerned with the location and design of the ramps connecting the

bridge structure with Broad Street and McCarter Highway and the western terminus of the bridge approach structure. Because of the complicated engineering problems involved, it was decided that the Planning Board would prepare an alternate design more nearly fitted to the needs of Newark. This design was prepared and the above mentioned report submitted to the Board of City Commissioners on October 25, 1944.

Numerous conferences have been held between the Planning Board and the State Highway Department in an attempt to resolve the differences in the two plans. As a result of these conferences, the State Highway Department made certain minor revisions of their plan, and legislation was enacted extending Route 25-A to Clifton Avenue from its original terminus west of High Street. As a result of these conferences, it was decided to prepare models of the two plans, and after completion of the models submit them to the public for discussion and suggestions. This was done and several public meetings were held during the months of July and August 1945.

From the Planning Board's report the location of the proposed bridge makes it potentially a vital link in the highway plan for Newark and the metropolitan area. For that reason studies were made to determine the most appropriate location of a connecting highway between the end of the bridge approach at Clifton Avenue and the western suburban communities. In the course of these studies it was decided that there should be a traffic interchange at Clifton Avenue to permit traffic originating from the north and west either to proceed eastward over the bridge or to reach the downtown section of Newark as quickly as possible. Briefly, it is proposed to construct a traffic circle in the vicinity of Eighth Avenue and Clifton Avenue which would join the approaches to the bridge, Clifton Avenue, Norfolk Street, Nesbitt Street and the western freeway extension. Through bridge traffic

would cross over the circle by means of an elevated structure and thus would not become mixed up with the traffic movements on the surface. It is planned to widen Lock Street, between Nesbitt and New Streets, and construct an overpass across Central Avenue, so that traffic destined for downtown Newark could reach Raymond Boulevard at Warren Street with a minimum of interference. If the highway is extended westward from the traffic circle at Clifton Avenue, opportunities will be afforded for convenient movement of traffic from all parts of the northern residential section of Newark and suburbs to downtown Newark and to New York over the new bridge. It is also proposed to connect Clifton Avenue to Mt. Prospect Avenue at Bloomfield Avenue, thus providing a continuous north and south highway from the suburban area north of Newark to the Clifton Avenue traffic circle. It is also proposed to improve and widen Norfolk Street providing a direct connection with Belmont Avenue to Elizabeth Avenue and Frelinghuysen Avenue, thus completing a continuous north and south crosstown highway through Newark.

The proposed western extension of Route 25-A to Clifton Avenue follows the general location shown on Plate 8. The Newark section of this proposed freeway consists of an elevated structure crossing the Clifton Avenue traffic circle, the Lackawanna Railroad, Orange Street, First Street, Second Street, Third Street, Fourth and Fifth Streets coming to grade at Sixth Street. West of Sixth Street, the highway is depressed and will go under Roseville Avenue, Market Street and Fourteenth Street. It is planned to close certain intervening streets such as Second Street, Third Street, Fifth Street, Sixth Street, Seventh Street, Myrtle Avenue, Eleventh Street, Twelfth Street and Fifteenth Street. In most instances, where local streets are to be closed, they will be joined together along the freeway to form a local service road parallel to the freeway. In order to facilitate pedestrian movements, pedestrian underpasses will be provided between Second

Street and Third Street and an overpass will be built at Sixth Street.

Points of entrance and exit are limited to important cross-thoroughfares including Roseville Avenue, the traffic circle at Clifton Avenue and Twelfth Street. West of Market Street, Gould Avenue is utilized as a local service street and a similar facility is provided on the southside of the freeway. Traffic wishing to leave the freeway may do so at Twelfth Street and thus reach West Market Street near Sussex Avenue. Traffic may also enter the freeway by means of Gould Avenue at Twelfth Street. Interchanges are permitted at Roseville Avenue for southbound traffic on Roseville desiring to proceed west on the freeway and for northbound traffic on Roseville Avenue and Seventh Street desiring to proceed eastward on the freeway. An exit ramp for westbound traffic is also provided at Seventh Street near the entrance.

Traffic desiring to proceed to downtown Newark may leave the freeway and proceed via West Market Street or Sussex Avenue or may continue to Clifton Avenue where ramps are provided to connect the elevated portion of the freeway to the traffic circle and hence to downtown Newark via an improved Nesbitt Street, Lock Street and Raymond Boulevard.

The freeway is designed to accommodate three moving lanes of traffic in each direction and will require a right-of-way varying in width from 270 feet to 90 feet where the elevated structure crosses the City Subway and the Branch Brook Park, Southern Division. The depressed section of the freeway requires a maximum right-of-way width with local service streets along the side. Typical right-of-way widths and sections are shown on the drawing. In most instances, the elevated section will be of earth fill with landscaped side slopes as shown in sections L.L. and K.K. Where the structure is to be built of concrete its section is as shown in section J.J. depressed sections

Table 6

COST ESTIMATES FOR APPROACHES TO WILLIAM M. STICKEL BRIDGE, THE PROPOSED WESTERN EXTENSION OF ROUTE 25-A, STREET AND RAILROAD RECONSTRUCTION AT BROAD STREET AND LACKAWANNA RAILROAD, AND IMPROVEMENTS OF LOCK STREET.

(A) <u>Bridge Approaches - Boyden St. to Passaic River</u>				
1.	Construction Costs		\$1,782,000	
2.	Land Acquisition Costs	\$755,550		
3.	Damage to Improvements	772,650		
4.	Acquisition Expense	84,308	1,612,508	\$3,394,508
	Total Cost			
(B) <u>Extension of Route 25-A - Boyden St. to City Limits</u>				
1.	Construction Costs		\$3,091,000	
2.	Land Acquisition Costs	\$729,675		
3.	Damage to Improvements	2,647,750		
4.	Acquisition Costs	115,342	2,492,767	\$5,583,741
	Total Cost			
(C) <u>Street and R.R. Reconstruction - Broad & Lackawanna R.R.</u>				
1.	Construction Costs		\$276,400	
2.	Land Acquisition Costs	\$79,500		
3.	Damage to Improvements	54,150		
4.	Acquisition Costs	4,647	138,297	\$414,697
	Total Cost			
(D) <u>Widening Lock Street and Central Avenue Grade Separation</u>				
1.	Construction Costs Grade Separation	\$188,400		
2.	Repairing Lock Street, New, Warren	19,642	\$208,042	
3.	Land Acquisition Costs			
	43,800 sq. ft. @ \$300	131,400	131,400	\$239,441
	Grand Total			\$9,732,411
Total Cost of Construction			\$5,357,442	
Total land and improvements			4,374,972	

of the freeway would be provided with landscaped side slopes as shown in sections N.N. and P.P.

Provisions are made on the freeway to accommodate local and inter-urban bus lines and loading and unloading facilities are planned where crosstown lines intersect the freeway, for example, at Roseville Avenue, where the freeway is depressed, loading platforms have been provided and connected to Roseville Avenue by stairways. At First Street where the freeway is elevated, loading and unloading platforms are provided on the elevated structure and stairways lead downward to First Street. Similar facilities are provided at the Clifton Avenue Traffic Circle so that bus passengers can transfer at that point.

Estimated Cost. It is estimated that the total cost of the improvements shown on this plate will be \$9,732,000. The project is divided into four sections, and the estimates for each section are shown on Table 6.

Construction costs were estimated from a detailed breakdown of materials and labor, while land acquisition costs were estimated by applying a factor of 1.5 to the total assessed value of land and improvements taken. To those estimated land costs were added legal expenses estimated at 4% of the acquisition cost of the land and improvements.

PROPOSED IMPROVEMENT

OF RAYMOND BOULEVARD AND MORRIS CANAL

The main approach to the city from the east and from the Pulaski Skyway is via Raymond Boulevard.

At the present time, traffic from Pulaski Skyway uses the exit ramp which terminates in Lockwood Street, approximately 150 feet north of Raymond Boulevard. It is proposed to utilize the right of way of the old Morris Canal between the intersection of Lock Street and the Pulaski Skyway exit ramp for a roadway paralleling Raymond Boulevard to a point near the intersection of Raymond Boulevard and Market Street.

In addition to providing more capacity for east and west traffic in the Ironbound section, the proposed improvement would also include the development of a river front park between a point near Brill Street and the Jackson Street Bridge. Eventually the property lying between the Morris Canal and Raymond Boulevard should be acquired for park purposes, thus making the new Raymond Boulevard a wide dual lane parkway. This would provide an exceptionally attractive entrance to the city from the east.

Plate 10 shows the proposed improvement in two sections. The first section extends from Lockwood Street to Madison Street while the second section continues westward to the intersection of Raymond Boulevard and Market Street.

The present Raymond Boulevard would remain as it now exists except for additional tree planting. The bed of the Morris Canal would be improved with a roadway 40 feet in width corresponding to the present width of Raymond Boulevard east of Market Street and between Lockwood and Brill Street. The two roadways would be separated by a park strip approximately 135 feet in width. This intervening area is now partially vacant and

P A S S A C R I V E R

SECTION 2 OF
PROPOSED IMPROVEMENT OF RAYMOND
BOULEVARD AND MORRIS CANAL
FROM
LOCKWOOD STREET TO MADISON STREET

CITY PLANNING BOARD OF
THE CITY OF SEASIDE, N.J.

EDWARD BARRETT OWEN & ASSOCIATES
CITY PLANNERS

SECTION 1 OF
PROPOSED IMPROVEMENT OF RAYMOND
BOULEVARD AND MORRIS CANAL
FROM
LOCKWOOD STREET TO MADISON STREET

CITY PLANNING BOARD OF
THE CITY OF SEASIDE, N.J.

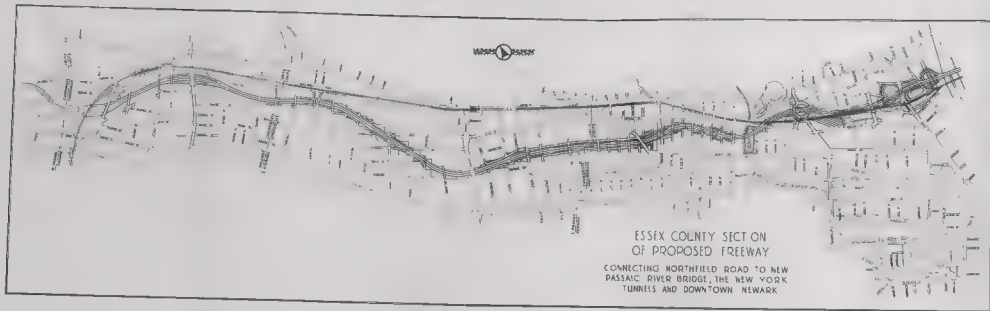
EDWARD BARRETT OWEN & ASSOCIATES
CITY PLANNERS

partially occupied by various commercial and industrial buildings, none of which would be unduly expensive to acquire. West of Brill Street, the two roadways merge and form a dual lane highway separated by a 12 foot grass plot.

The Essex County Park Commission and the City of Newark now own practically all of the riverfront property between the Jackson Street Bridge and Brill Street. A pierhead and bulkhead line along this part of the riverfront had been established some distance out from the present bank. It is proposed to bulkhead this section, fill in the land back of the bulkhead and construct a promenade along the bulkhead line. This would create a strip of park land about 100 feet wide between the north line of the proposed roadway and the river's edge. The park strip should be landscaped by planting trees along the edge of the promenade and providing grass over the remainder of the property.

The proposed improvement is a major step of revitalizing the eastern park of the city. It is coordinated with plans of the Newark Housing Authority for constructing the Franklin D. Roosevelt Homes Housing Project at Chapel Street and a possible enlargement of that project either to the east or west of the project now under construction. Also there are two parks fronting on the north side of Raymond Boulevard namely: River Bank and Hayes Park East.

It is proposed eventually to replace the Jackson Street Bridge by a high level structure which would come to grade near Wilson Avenue and Ferry Street. Provisions are made under this plan to provide ramps connecting the bridge to Market Street to accommodate southbound bridge traffic desiring to reach downtown Newark or to proceed west on Raymond Boulevard. A ramp is also provided on Market Street for traffic desiring to go to Harrison.



The proposed improvement can be carried out over a period of years in three main steps: (1) building the new roadway in the Morris Canal right of way; (2) developing the riverfront part and (3) acquiring and developing the property lying between the Morris Canal and Raymond Boulevard.

PROPOSED EXTENSION OF ROUTE 25-A TO NORTHFIELD ROAD IN WEST ORANGE

The construction of the proposed east and west freeway from the Passaic River to Newark corporate limits has been discussed in a previous chapter of this report (see Plate 9). Plate 11 shows the general alignment of the proposed route from the Passaic River to its connection with Northfield Road in West Orange. The plan has been coordinated with the Street Plans of East Orange, Orange, and West Orange as well as Essex County and official approval of the general location of the route has been given by the planning agencies and governing bodies of the three affected municipalities.

In East Orange, the proposed route extends westward from the Newark corporate limits along Sussex Avenue to Grove Street where it curves slightly to the south and crosses Union Parkway between Chestnut Street and Central Avenue. From that point, the highway extends to the northwest extending under Munn Avenue, Arlington Street, Chestnut Street, Shepard Avenue and Halsted Street. Intervening local streets are to be closed. Access to the highway will be provided at Orton Parkway, Shepard Avenue and at Evergreen Place. At Evergreen place, the highway passes under Harrison Street and enters Orange near Webster Place. Through Orange, the highway will be depressed, crossing under all of the intersecting cross streets. An interchange is provided at Centre Street and the freeway. The proposed freeway will cross under the Lackawanna Railroad and enter a traffic circle at South Jefferson Street near the West Orange line, and then extend westward to

connect with Whittingham Place and Northfield Road.

While no cost estimate has been prepared and no detailed studies made as to right-of-way acquisition costs, the proposed location has been selected as the most advantageous to the various communities from the standpoint of accessibility and service.

Responsibility for carrying out this improvement lies with the State Highway Department which will make final decision as to design and location. The proposed route is suggested as one most nearly meeting the requirements of the various communities and has been drawn to give the State Highway Department the benefit of studies made by these communities.

FINANCIAL CONSIDERATIONS

DEVELOPMENT OF THE PLAN

FINANCIAL CONSIDERATIONS

It is customary practice in most American cities, including Newark, to assess the cost of making local street improvements such as grading, paving and curbing to the adjoining property owner. This procedure is logical as the streets provide access for property.

When it becomes necessary to widen a street or to improve it with heavier pavement because of an increase in through traffic it becomes unreasonable to assess the full cost of such improvement against adjoining property owners. Some part of the total cost should be borne by a public agency. The amount depending upon the circumstances existing in each individual case.

The opening or widening of a street in order to meet growing traffic needs frequently enhances the values of property adjoining the improvement or in the vicinity thereof. This is particularly true of business frontage whose value is largely dependent upon how accessible it is to the customer. In Newark, the law provides that, where it can be shown that property will be benefited by a street improvement it shall pay its share of the cost in accordance to the benefit received. The entire cost may be assessed against property where benefits to that extent are found or any percentage of the cost may be assessed, the remaining portion to be paid by the City as a whole.

This is a fair and equitable procedure which has worked well in the past and will make it possible to carry out a reasonable street improvement program in the future without unduly burdening either the property owner or the City.

During the depression of the 1930's many cities were engaged in street improvement programs in carrying out which benefit assessments had been levied against many property owners. With the collapse of the real estate market it became difficult, if not impossible, for the owner to pay these assessments. Relatively little work of this nature has been undertaken in recent years because of this fact and because of war conditions.

Public antipathy toward carrying out future improvement programs by benefit assessment method should not be permitted to force the City into the position of underwriting the entire cost of such improvements. It would be impossible to finance any substantial and necessary program in this manner. Regular procedure through the Board of Local Assessment under existing state laws should be adhered to and no attempt should be made to arbitrarily allocate any definite proportion of the cost to the city at large.

In Newark the city's share of the cost of making corrective improvements or carrying out new street programs is met by bond issues. This is a satisfactory method of financing where the life of the bonds does not exceed the life of the improvement and when interest and amortization costs are within the financial ability of the city to pay without creating an unduly burdensome tax rate. In view of the fact that increased expenditures undoubtedly will be necessary to meet post-war traffic needs as well as other governmental problems, and in view of the fact that the city has a relatively high bonded debt and tax rate, it is doubtful if an essential public works program can be financed without tapping additional sources of revenue.

In New Jersey a tax is levied on the sale of gasoline and a license fee is charged for the use of each motor vehicle. Proceeds from these taxes accrue to the state and are expended for highway improvements on a statewide basis. While the state highway system is far from complete and needs modernization the greatest unsolved traffic problems exist in the metropolitan areas

of large cities such as Newark. Despite the fact that a large proportion of the state's highway revenues are derived from citizens of Newark and Essex County, only a relatively small amount of these funds have come back to the community in the form of highway improvements.

In 1941 the State of New Jersey collected approximately \$50,500,000 in gasoline taxes and motor vehicle license fees, divided almost equally between the two sources of revenues. Based on automobile registration it is estimated that approximately \$10,000,000 of funds originated in Essex County and approximately \$5,220,000 came from Newark. During the same year the State expended a total of \$683,000 in Essex County on highway construction and maintenance and made an additional sum of \$650,000 available for highway work in the form of direct County aid and direct Township and Borough Aid. In other words, out of \$10,000,000 derived from Essex County, \$1,330,000 or 13.5 per cent came back in the form of direct expenditures or grants. In 1943 this percentage was 21.5.

Obviously, this an inequitable situation which needs early correction. In Illinois, for example, the proceeds of all gasoline taxes and license fees are allocated 33 per cent for extension, maintenance and operation of the primary system, 33 per cent to counties and 33 per cent to cities; each city and county being required to maintain an up-to-date major highway and street program upon which all such funds must be expended. Consideration should be given to enactment of similar legislation in New Jersey.

Certain highway improvements have been made in Newark by the State Highway Department, notably the McCarter Highway and State Route 25. Other improvements have been made in Essex County and numerous future projects are planned for Newark and vicinity. These are all beneficial to the City but under present laws there is no way that state highway funds can be advanced

to Newark for use on streets under the city's jurisdiction.

By agreement, Essex County has taken over certain streets in the City of Newark and has assumed responsibility for their improvement and maintenance. It would not be wise to extend this policy indefinitely but there are certain Newark streets which are continuations of important county highways and logically form a part of the county highway system. In these instances it would be good public policy for the City to agree to turn the streets over to the County. While a large percentage of county funds are derived from Newark such a policy would result in substantial savings to the Newark taxpayer.

In recent years the Federal government has increasingly recognized the urgency of alleviating traffic congestion in urban centers and legislation adopted in 1944 provides funds for this specific purpose. These funds are to be expended by the State on urban streets which are part of the Federal Aid System and to the extent that such funds are made available and are expended in Newark street improvements they will be ~~beneficial~~ to the city. It is estimated that under this legislation Newark is entitled to a minimum of approximately \$4,720,000 of State and Federal funds to be expended for highway improvements in the city over a three year period beginning in 1946.

BUILDING LINES

The Major Street Plan calls for the eventual widening of many Newark streets. Practically all of these streets are built up with structures, some of them on the street line and others set back varying distances. Many of these buildings are old and will be replaced by new structures in the near future.

When a street is widened or extended the most expensive part of the improvement is the cost of acquiring the needed right-of-way. This is

especially true where land is improved with buildings which must be completely or partially razed. Any procedure that will reduce this cost will be a substantial contribution toward carrying out the street plan.

New Jersey law provides a method by which it is possible to require all new buildings to observe the future line of the street in the case of a future widening so as not to be erected in the bed of a future street.

The Municipal Planning Enabling Act, Chapter 40:55-1 to 40:55-21 sets out the procedure for adopting a street plan and an official map on which present and future street lines are shown. The Planning Board may adopt the Master Plan in part or it may adopt a major part thereof, such as the Major Street Plan. Following such action, the Board of City Commissioners may adopt an official map by ordinance and then in the future no permits may be issued for any building in the bed of any street shown or laid out on the official map. Provision is made for taking care of cases of unusual hardship by action of the Board of Adjustment. As this is a police power regulation no compensation is paid for observance of the future street line.

Building lines on individual streets have been established in Newark in the past but such lines have not been laid down in accordance with a comprehensive plan of street improvements. For that reason they have not been entirely successful.

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